# **Appendix A: Comments and Responses**

Many commentor's letters raised similar concerns regarding Cook Inlet Areawide Lease Sale. Section A of this appendix includes a summary of common issues, and ADNR's responses. Section B includes issues raised at the four public hearings, held in Soldotna, Palmer, Anchorage and Homer, and ADNR's responses to those spoken comments. Section C includes all written comments received following the preliminary finding and ADNR's responses to those comments. Section D includes a re-print of comments and responses, which appeared in the Preliminary Best Interest Finding as Appendix A.

## **Public Comment Periods for Cook Inlet Areawide 1999**

- Call for Comments on Five-Year Oil and Gas Leasing Program issued July 21, 1992:
   Deadline August 21, 1992
- Second Call for Comments issued December 21, 1993: Deadline June 15, 1994
- Call for Comments Five-Year Oil and Gas Leasing Program issued July 7, 1994:Deadline September 7, 1994
- Third Call for Comments issued January 28,1997: Deadline July 28,1997
- Preliminary Finding of the Director, Proposed Cook Inlet Areawide Oil and Gas lease Sale (formerly Sale 85): Deadline June 29, 1998.

Appendix A: Comments and Responses	
A. Common Issues	
Economic Need for Sale	
Alternative Energy Sources	A-6
Habitat Protection	A-7
Private Property Rights	A-7
River Buffers	A-8
Brown Bears	A-9
Beluga Whales	A-10
Air and Water Quality	
Produced Water Discharge	
Sale Area	
B. Public Hearings	
1. Issues Raised	
2. Participants	
Soldotna, Central Peninsula Sports Center, 4/27/98	
Palmer, Mat-Su Borough Assembly Chambers, 4/29/98	
Anchorage, Steller School, 4/30/98	
Homer, Homer Elks Lodge, 5/7/98	
C. Written Comments	
1. Local Government	
Kenai Peninsula Borough, Rachel Clark, 6/23/98	
Matanuska-Susitna Borough Planning Department, John Duffy, 6/26/98	
2. State Government	
Representative Norman Rokeberg, Alaska Legislature, 6/29/98	
Alaska Department of Fish and Game, Lance Trasky, 6/29/98	
3. Federal Agencies	
National Marine Fisheries Service, Steven Pennoyer, 6/8/98	
4. Business	
Alaska Railroad Corporation, Governor Bill Sheffield, 5/28/98	
Anadarko Petroleum Corporation, Todd Liebl, 6/19/98	
ARCO Alaska, Inc., Michael A. Richter, 6/24/98	
Associated General Contractors of Alaska, J. A. Fergusson, 6/23/98	
Carlisle Enterprises, Inc., Harry McDonald, 5/15/98	
Cook Inlet Region Incorporated, Telissa J. Yoder-Sickler, 6/5/98	
Cook Inlet Region Incorporated, Candace R. Beery, 6/16/98	Δ-40
ENSTAR Natural Gas Company, Thomas Waldock, 4/30/98	
Hawk Construction Consultants, Daniel J. Steffan, 5/2/98	
Jackson Construction, Harold Jackson, 4/26/98	
Kachemak Bay Wilderness Lodge, Michael and Diane McBride, 5/17/98	
Lynden Inc., Jim Jansen, 5/18/98	
Marathon Oil Company, John A. Barnes, 6/29/98	Λ-42
Raven Contractors Inc., Hugh Chumley, 4/28/98	
The Surveyor's Exchange, Larry Wilmuth, 4/30/98	
Totem Ocean Trailer Express, Inc., Ted Deboer, 4/29/98	
Udelhoven Oilfield System Services, Inc., Milton Allen, 6/24/98	
Udelhoven Oilfield System Services, Inc., James Udelhoven, 4/29/98	
Union Oil Company of California (Unocal), Rick D. Cross, 6/29/98	
Webb Business Consulting Services, William F. Webb, 5/4/98	
The Wilson Agency, LLC, Lon G. Wilson, Anchorage, 5/21/98	
5. Organizations	
Alaska Emergency Response Team (ALERT), Susan Alexander, 5/4/98	
Alaska Oil and Gas Association, Judith Brady, 6/29/98	
Alaska Support Industry Alliance, Karen Cowart, 6/29/98	
Alaska Support Industry Alliance, Bill Stamps, 5/7/98	A-48

	Alaska's People, Kris N. Anderson, 6/11/98	
	Anchorage Chamber of Commerce, April Jensen, 6/5/98	A-49
	Cook Inlet Keeper, Bob Shavelson, 6/29/98	A-50
	Juneau Chamber of Commerce, Bruce Abel, 6/26/98	
	Kachemak Bay Conservation Society, Laurie Daniel, 4/28/98	
	Kenai Peninsula Fishermen's Association, Brent Johnson, 4/30/98	
	National Audubon Society-Alaska State Office, John W. Schoen, 6/26/98	
	Ninilchik Native Association Inc., William C. Prosser, 6/17/98	
	North Peninsula Chamber of Commerce, Harry Eaton, 5/11/98	
	Oilwatch Alaska, Jim Sykes, 6/29/98	
	Trustees for Alaska, Stacy Marz, 6/29/98	
۵	Public Comments	
Ο.	John Allen, Anchorage, 6/25/98	
	Tom Anglen, Eagle River, 6/25/98	
	Jeff Arndt, Sutton, 5/1/98	
	David Argetsinger, Anchorage, 6/26/98	
	Conrad Bagne, @asrc.com, 4/30/98	
	Edgar Bailey and Nina Faust, Homer, 5/14/98	
	Fred Bakun, 6/25/98	
	Allen E. Baldwin, Kasilof, 5/13/98	
	Terri Barefield, 6/25/98	
	John Barnes, Anchorage, 6/29/98	
	Norm Berge, Soldotna, 6/29/98	
	John W. Bishop, 6/26/98	A-106
	Daniel O. Blanchard, Soldotna, 6/25/98	A-107
	Susan Grace Blandin, Girdwood, 4/29/98	A-107
	Rob Borchgrevink, Nikiski, 6/29/98	A-107
	Steve Borell, Anchorage, 5/27/98	A-108
	Erick Borland, Anchorage, 5/28/98	
	Janet Bounds, Anchorage, 4/30/98	
	James Bragg, Anchorage, 625/98	A-109
	Tom Brennan, 6/17/98	
	Michael A. Brogan, Anchorage, 4/28/98	
	Doug Brown, Kenai, 6/29/98	
	Kevin K. Bruce, Anchorage, 5/26/98	
	Lynda M. Buechner, Anchorage, 4/28/98	
	Michael Carpenter, Kenai, 5/1/98	Λ-110
	Steve Carson, Anchorage, 4/30/98	Λ-110
	Bret Chambers,	
	Brad Chastain, Anchorage, 6/26/98	
	Kevin Clement, Homer, 6/23/98	
	William Coghill, Soldotna, 4/30/98	
	Joel Cooper, Homer, 6/29/98	
	Nora Cousens, Petaluma, California, et al., 5/15/98 (see end note)	
	William M. Cox, Anchorage, 6/6/96	
	Krissell Crandall, 6/25/98	
	Brian Crockett, Seattle WA, 6/26/98	
	Jack and Marilyn Crockett, Anchorage, 6/29/98	
	Van Crowell, Soldotna, 6/25/98	A-114
	Terry L. Cummings, Anchorage, 6/29/98	A-114
	Chlorinne Cunningham, Kenai, 6/9/98	
	Lee Daigle, Soldotna, 4/29/98	
	Lisa Deckert, 6/29/98	
	Steve Deckert, Anchorage, 6/25/98	
	Robert J. Dickson, Anchorage, 5/1/98	A-116
	John Donohue, 6/26/98	A-116

Regan Drake, Anchorage, 6/25/98		
Joseph Dukowitz, Nikiski, 6/29/98	A-117	7
Rick Dukowitz, Kenai, 6/29/98		
Robert Dukowitz, Nikiski, 6/29/98		
Rodney Dukowitz, Nikiski, 6/29/98	A-117	7
Harry Eaton, Nikiski, 6/25/98	A-117	7
Harry A. Eaton, (e-mail), 4/6/98	A-117	7
Dave Edgell III, Soldotna, 6/29/98		
Maxine Edwards-Lantz, Anchorage, 4/21/98	A-118	3
Ed Ellis, Trapper Creek, 5/10/98		
Chris Endsley, Soldotna, 6/9/98		
Mark Flagg, Anchorage, 5/4/98		
Tom Gallagher, Anchorage, 5/1/98		
Monica D. Gere, Anchorage, 6/8/98		
Scott L. Gere, Anchorage, 5/28/98		
Jim Gilbert, Wasilla, 4/29/98		
Patty Ginsburg, Anchorage, 5/26/98		
Louis P. Gire, Anchorage, 5/26/98		
Evelyn M. Goebel, Anchorage, 6/25/98		
Bill Grames, Anchorage, 6/25/98		
Leigh A. Gray, Anchorage, 5/26/98		
Frank and Georgia Griffin, Soldotna, 4/27/98		
Beverly Greenhow, New York NY, 5/16/98	A-121	1
Laura L. Hammond, Nikiski, 6/29/98	Δ-12	1
Kathleen G. Heckel, Anchorage, 6/3/98		
Reade Hensley, Kenai, 5/4/98		
Lorraine Hebert, Anchorage, 5/26/98		
Doug D. Herford, 6/25/98		
Stu Hirsh, Anchorage, 6/25/98		
Kathryn Hollstein, Anchorage, 6/24/98		
John Horstkoetter, Anchorage, 6/25/98	Λ-12¢	ر 2
Brent Hughes, Anchorage, 5/10/98		
Lyndon C. Ibele, Anchorage, 6/18/98		
Jake Ivanoff, Kenai, 5/6/98  Dennis Johnson, Soldotna, 6/26/98	A-124	+ 1
Donald M. Johnson, Anchorage, 5/29/98	A-124	+
Lana Johnson, Anchorage, 5/26/98		
Richard Blake Johnson, Kenai, 6/22/98		
Michael R. Juliussen, Kenai, 5/8/98		
Nicholas Kategianes III, Soldotna, 6/29/98		
Nancy Knuutila, Anchorage, 4/30/98		
Jack Koestline, 6/25/98	A-120	2
James W. Konst, Kenai, 6/19/98		
Paul Laird, Eagle River, 6/25/98		
Karen Lauder, 6/25/98	A-126	)
John H. Lettow III, Wasilla, 6/29/98		
Dore Liston, Eagle River, 6/25/98		
Kim Low, Anchorage, 5/26/98	A-129	)
Mark Lusch, Wasilla, 6/8/98		
Christine Lutsch 6/25/98		
David Manzer, (e-mail), 4/28/98	A-130	)
Richard and Jane Marshall, Kenai, 6/10/98		
David Mathews, Homer, 5/19/98		
Thomas E. Maunder, Anchorage, 6/26/98		
Ray W. McCubbins Jr., Kenai, 5/7/98		
Steve McCutcheon, Anchorage, 4/29/98	A-132	2

	Lela McGee, Kenai, 6/10/98	A-	132
	Joseph McKee, Kenai, 6/8/98		
	Michael L. McKinney, Anchorage, 5/1/98		
	Patrick McNamara, Homer, 6/25/98		
	Marla McPherson, Homer, 4/28/98		
	Lloyd Mercer, Soldotna, 6/26/98		
	George Meyer, Anchorage, 5/26/98		
	Scott Misner, 6/25/98		
	Ivan Moore, Anchorage, 5/29/98		
	Chris S. Myers, 6/25/98		
	Mike Nugent, 6/25/98		
	William B. Odom, Wasilla, 6/25/98		
	Doug Olson, Nikiski, 5/4/98	A-	143
	Susan Olsen, Anchorage, 6/25/98	A-	143
	Susan Olsen, Anchorage, 5/3/98	A-	143
	James Palmer, Anchorage, 4/30/98	A-	145
	Jim Patten, Kenai, 6/26/98		
	Robert T. Peterkin II, Kenai, 5/11/98		
	Ernest Piper, Anchorage, 5/26/98		
	Kathleen Plunkett, Anchorage, 6/24/98		
	Jeff Richardson, Homer, 6/29/98		
	J. Brock Riddle, Anchorage, 6/29/98		
	Janice Ryan, Anchorage, 5/26/98		
	George Schmidt, Anchorage, 5/28/98		
	Dan Seamount, 6/25/98		
	Alan Seegert, Denali Park, (date)		
	Brent M. Senette, Soldotna, 6/29/98		
	Stanley E. Senner, Anchorage, 6/28/98		
	Tamara Sheffield, Anchorage, 6/23/98		
	Richard H. Skeppstrom and Karen L. Bangel, Portsmouth, VA, 6/29/98		
	Scott R. Sloan, 6/25/98		
	Jeff W. Smetanka, 4/30/98		
	Chris J. Sonnichsen, 6/26/98	A-	154
	Anita R. Stahl, Homer, 4/25/98		
	Richard Stewart, Anchorage, 4/30/98	A-	154
	Michael J. Stover, 6/26/98	A-	155
	Kent St. John, Anchorage, 5/26/98		
	R. John Strasenburgh, Anchorage, 6/28/98		
	Thomas M. Stroman, Kenai, 5/8/98		
	Randy Super, Juneau, 5/25/98		
	John R. Swanson, Minneapolis MN, 6/22/98		
	Jim Thompson, Kenai, 6/9/98		
	Richard Tyler, Homer, 5/7/98		
	Charles A. Underwood Jr., Anchorage, 6/29/98		
	William O. Vallee, Anchorage, 6/16/98		
	Arndt von Hippel, Anchorage, 6/26/98		
	Stanley T. Warta, 6/26/98		
	Gordon Wetzel, 6/25/98		
	Jeff Williams, 6/25/98		
	Ruth D. Wood, Anchorage, 6/27/98		
	Neva Wynn, Kenai, 6/26/98		
	Ken Zafren, Anchorage, 4/27/98		
	Jeffrey M. Zeman, Anchorage, 6/26/98		
D 6	Kaynell Zeman, Anchorage, 6/26/98		
D. Cor	mments and Responses Prior to Preliminary Best Interest Finding	A-	170

## A. Common Issues

## **Economic Need for Sale**

1. There is no significant need for the sale and for continued leasing. Cook Inlet only provides a small share of total state production (and revenues) Most industrially used Cook Inlet gas is exported. Exports should be prohibited. There is a significant need for this sale. Oil and gas development is important for the state and local economy, providing jobs and tax revenue (see Chapter Seven, "Fiscal Effects"). Natural gas is consumed to heat homes and businesses and provide electric power to 60 percent of Alaskans and leasing is necessary to ensure new discoveries of gas and oil. In addition industrial use of Cook Inlet gas and oil maintains a job base and tax base for the KPB and state.

With oil and gas production in decline in Cook Inlet and Alaska since the 1980s, many local service companies have closed resulting in a loss of jobs and tax revenue. Because of Alaska's remote location, the cost of importing natural gas into the area will likely result in higher utility costs. If leasing and exploration is curtailed, residents will likely pay higher utility rates in the future, jobs will be lost, and local property and sales taxes could rise.

The export issue is beyond the scope of this lease sale decision. Export permits are issued by the Federal Energy Department, not the state of Alaska.

# Alternative Energy Sources

2. The state needs to develop alternative energy sources instead of just leasing.

Coastal development standard (6 AAC 80.040) requires that alternatives to leasing be feasible and prudent. Currently, other energy, job, and revenue generating alternatives, such as coal, solar, or wind power cannot provide the same benefits to Alaska as oil and gas development because of their high cost. Alternative energy-producing technologies are undeveloped, and use of other fossil fuels, like coal would not be environmentally preferable. However, ADNR recognizes that in the long run, sources of energy other than oil and gas will be needed. Lessee Advisory 5(b) encourages Lessees to sponsor research on alternative energy sources.

The Department of Community and Regional Affairs, Division of Energy has an alternative energy development program. This program aims to evaluate and develop rural energy alternatives including small hydro, village interties, conservation, and energy supply based on wood, municipal solid waste, wind and coal.

#### **Habitat Protection**

3. Delete all environmentally sensitive areas: Critical Habitat Areas, State Game Refuges, state and federal parks, tracts south of Ninilchik, offshore areas south of Kalgin Island, the Kenai River, commercial fishing areas, recreational and sport fishing areas, and subsistence use areas.

Oil and gas leasing is permitted in State Game Refuges and Critical Habitat Areas with surface entry restrictions. In other SGR's, CHA's, and the Kenai River Special Management Area, subsurface acreage may be offered, but oil and gas development on the surface is prohibited. Surface entry is prohibited in recreation areas and in portions of some critical habitat areas. There are no state or federal parks being offered for lease in this sale.

Habitat protection concerns are addressed in the 31 mitigation measures and eight Lessee Advisories. These are protection measures beyond what is required under existing law (See Chapter Eight and Appendix B). Restrictions on oil and gas activities apply to many special areas, such as offshore waters, tidelands, rivers, and lakes. Mitigation measures will minimize impacts to commercial fishing, recreational and sport fishing, subsistence use areas and the physical environment. As specific projects are proposed, habitat use evaluations will be completed as part of the plan of operations review and additional mitigation measures imposed if necessary. Given these measures and advisories in addition to existing law, it is not necessary to delete subsurface acreage from the sale. Effects on subsistence, recreation, fishing, municipalities, communities, and other important uses of the sale area are discussed in Chapters Five, Six, and Seven.

## **Private Property Rights**

4. Most people do not own the subsurface rights to their property and it can be leased by the state. If leased, drilling rigs have the right to enter private land. Delete private property from the sale area.

Most private property owners gained title to their land from the state either directly or from another landowner. The Statehood Act and AS 38.05.125 requires that in each sale, lease or grant of state land, ownership of the subsurface resources (oil, gas, coal, ores, minerals, geothermal resources, etc.) is reserved by the state. This reservation includes the right to enter the surface estate for the purpose of opening, developing, drilling, and removing the mineral resources beneath it. This reservation of the public interest is part of each deed awarded and belongs in trust to all the people of Alaska.

However, mitigation measures and existing law address property owner concerns. All property owners within ½-mile of any proposed drilling must be notified. Additionally, two measures and an advisory address protection of private property rights. Lessees must include in their seismic permit applications a plan for notifying the public of their activities. Where surface activities are proposed on non state-owned land, lessees must submit a

copy of the plan of operations to the private surface owner. Plans of operation must describe the lessee's efforts to minimize impacts on residential areas and privately owned surface lands. Plan of operations permit applications must describe the lessee's efforts to communicate with local communities, and interested local community groups, if any, in the development of their plans.

Further, state law ensures that the surface owner be compensated for any damages to private property (AS 38.05.130). This law requires the state or its lessee to pay full payment for any and all damages sustained by the surface landowner. The state or lessee may only enter upon the land only after posting a surety bond and only after notice and an opportunity for the landowner to be heard. The bond must be sufficient to pay the damages, and to institute legal proceedings to determine the damages which the owner may suffer.

#### **River Buffers**

5. There should be ½-mile setbacks from the floodplains of rivers and streams.

The intent of river, stream and lake buffers is to protect the riparian zone. Under Mitigation Measure 6, facilities may not be sited within ½-mile of major rivers and within 500-feet of all fishbearing streams and lakes. After extensive negotiations the state's resource agencies agreed to restrict facility siting within the entire 100-year floodplain of the Kenai River. Buffers ranging form 500 ft. to ½ mile apply to other fishbearing streams and lakes within the sale area.

The Kenai River experienced a 100-year flood event at Soldotna in 1995, however, DO&G is unaware of any damage to oil and gas facilities. Therefore there is no iustification for increasing setbacks to ½ mile setbacks from the floodplains of rivers and streams. Adherence to the Uniform Building Code (1994) ensures that all facilities will be designed and built to withstand a 100-year flood. Additionally, all three boroughs have adopted floodplain construction guidelines into local code which require that uses within the 100-year floodplain be provided with flood protection or flood proofing at the time of initial construction (MSB: 17.29.180; MOA: 21.60; KPB: 21.06). Proper citing and engineering of oil and gas facilities will minimize the detrimental effects of flooding and other geophysical hazards. See Chapter Five "Geophysical Hazards."

Additionally, the stakeholders group considered ½ mile setbacks from the floodplains of every river, lake and stream, but did not reach a consensus that this setback

should be imposed. River buffers were the subject an ADF&G, ADNR and ADEC discussion via the ACMP.

#### **Brown Bears**

6. The brown bear population on the Kenai Peninsula is threatened by oil and gas development. Delay the sale until the interagency study team has completed a conservation plan. Responding to concerns about the long-term health of an isolated population of bears, the Alaska Department of Fish and Game has added the Kenai Peninsula brown bear to its list of "species of special concern." The listing will focus research and management attention on the population and is intended to prevent the bears from being listed by the federal government as a threatened or endangered species. A team of state and federal biologists is researching the bear's habitat needs, rate of reproduction, and movement patterns.

ADNR does not believe holding this sale as scheduled will harm the Kenai brown bear population. This finding may be amended to incorporate any new significant information about the status of Kenai brown bears. If warranted, new measures may be added to protect Kenai brown bears.

The following specific mitigation measures were developed by ADF&G for brown bear. To ensure sufficient vegetative cover in Kenai Peninsula brown bear feeding concentration areas, lessees may be required to locate exploration and development facilities beyond the 500-foot buffer along anadromous fish bearing streams. This requirement will be considered during review of site-specific plans of operations, in consultation with DF&G.

If data indicate that brown bear movement will be hindered by development and production activities, lessees may be required to locate facilities outside of the brown bear movement corridors around Skilak Lake, Tustumena Lake, along the upper Anchor River drainage, and at the head of Kachemak Bay. This requirement will be considered during review of site-specific plans of operations, in consultation with DF&G.

For projects in close proximity to areas frequented by bears, lessees are encouraged to prepare and implement bear interaction plans. Operations can be designed to minimize conflicts between bears and humans and minimize attraction of bears to facilities and work camps.

Before fieldwork can begin, known locations of den sites are identified and avoided by 1/2-mile during denning season. If new dens are encountered in the field, they must

be immediately reported to ADF&G. Exploration activities will only be allowed within the brown bear movement corridors after bears have denned for the winter.

Brown bears and their movement corridors are described in Chapter Three. Effects are discussed in Chapter Six, and protection measures in Chapter Nine.

## Beluga Whales

7. Delete key beluga whale habitat at the mouths of major rivers in Upper Cook Inlet as recommended by NMFS.

In November 1998, NMFS initiated a status review of the Cook Inlet beluga whale to determine whether designation under the MMPA or a change of listing classification under the ESA is warranted. The review will give consideration to the current status of Cook Inlet belugas (distribution, population abundance and trends, reproductive parameters, food habits). The effects of the Native subsistence harvest, and the potential effects of other humanly-induced impacts, as well as beluga natural mortality will also be examined (63 Fed. Reg. 64,228 (November 19, 1998)). ADNR is awaiting the results of that review.

According to Small and DeMaster (1995), the only documented human-caused mortality of beluga whales is subsistence harvesting. Post-sale activities are not expected to have any significant adverse effect on beluga whales or their habitat. While DO&G does not believe tract deletions are necessary to protect beluga harvesting and access to beluga whales, safeguards are provided that assure subsistence harvesting is not adversely effected.

Lessees must comply with all applicable local, state and federal codes, statutes and regulations, and any subsequent amendments, including the MMPA and ESA. This finding may be amended to incorporate any new significant information about the status of the beluga whale. If warranted, new measures may be necessary to protect beluga whales consistent with federal law. For discussion of effects and protection measures, see Chapters Six and Nine.

## Air and Water Quality

8. ADNR must consider the cumulative impacts of new and existing development on air and water quality as required by KPBCMP Policy 2.7.

ADNR has fulfilled the requirements for addressing cumulative effects of leasing as required under AS 38.05.035(g). See Chapters Five, Six, and Seven of the final finding. ADNR believes the analysis of effects presented is comprehensive and adequate enough for the Director to determine whether this sale, as configured with mitigation measures and lessee advisories, is in the best

interests of the state of Alaska. ADNR has fulfilled the requirements of KPBCMP policy 2.7 through this document and through the document "Revised Proposed ACMP Consistency Determination for Proposed Cook Inlet Areawide Oil and Gas Lease Sale (formerly Sale 85)." This determination was issued October 9, 1998, and is adopted here by reference. See also Alaska Coastal Management Program Consistency Analysis Regarding Proposed Cook Inlet Areawide Oil and Gas Lease Sale, March 31, 1998.

#### **Produced Water Discharge**

9. Require zero discharge of produced waters.

All discharges into Cook Inlet are regulated by EPA and ADEC under the National Pollution Discharge Elimination System permit. EPA is expected to reissue the general Cook Inlet NPDES permit after the state determines it consistent with the ACMP and enforceable district policies. Studies to date indicate produced water, muds, and cuttings discharges have not significantly degraded Cook Inlet water quality or the health of its dependent resources. This is likely due to the dynamic physical system of Cook Inlet, and the mostly natural composition of drilling fluids. A federally mandated monitoring program and other independent studies continue to search the Inlet for the presence of hydrocarbons and metals in marine water, sediments, and marine species. The EPA recently completed a study to determine the effects oil production discharges on Cook Inlet fish, shellfish and marine plants. Contaminants were either undetectable or well below levels set by federal standards. This study supports previous Cook Inlet water quality monitoring programs by MMS which found "extremely low concentrations of contaminants, making the inlet 'generally free from toxicity."

In Alaska, the U.S. Environmental Protection Agency issues NPDES permits, designed to minimize harmful effects of discharges as water quality and technology improvements are made. ADEC certifies that these discharge permits will not violate the state's water quality standards.

The state acknowledges the concerns raised by several Cook Inlet interest groups concerning drilling waste discharges. While the new NPDES permit does not cover new development and production sources, the state continues to support the EPA's proposed New Source Performance Standard for the Coastal Subcategory that would prohibit discharges of produced waters from new production facilities in Cook Inlet. Additionally, mitigation measure 19 identifies several prohibited areas of discharge

for muds and cuttings and produced waters and depthrelated requirements which respond to local water quality concerns. For a discussion on the NPDES permit system, and the effects on water quality, see Chapter Five.

#### Sale Area

10. Support areawide leasing. The state needs a stable and predictable leasing program. Mitigation measures will minimize environmental impacts. Industry has a good record of environmental protection. Oil and gas development provide jobs for Alaskans, and revenue for the state and local governments.

The state legislature passed the Areawide Leasing law unanimously, and the intent behind this strategy is discussed in Chapter One.

In the past, lease sales were held sporadically. It was unknown what acreage would be available from year to year, and investment decisions carried a high risk.

Areawide leasing is predictable, regular, and orderly. Lease offerings will be held each year at the same time and potential bidders will know in advance the environmental protection guidelines and lease terms. All of these things make for a stable business climate and make investment in the Cook Inlet basin more attractive.

Environmental protection measures have been developed over decades of lease offerings and today represent protection beyond what is required by existing law. These protection measures represent the strictest rules of engagement, while allowing for some flexibility when site-specific information or facts warrant their modification. Mitigation measures are worded with the premise of future analysis and agency review. Special and sensitive areas have no-surface entry provisions.

Both military and public utilities rely on Cook Inlet gas. Non-military electric power generation contributes to an intertie that serves an area from the Kenai Peninsula to the south, the Municipality of Anchorage, and communities along the Alaska Railroad to the Fairbanks North Star Borough. Cook Inlet gas is also widely used to heat homes and businesses in Wasilla, Palmer, Anchorage, Kenai, Soldotna, and Sterling. Availability of local natural gas has made utility rates as much as 40 percent lower than the national average. Cook Inlet gas is also used as feedstock for the Phillips LNG plant, the Unocal ammonia and fertilizer plant, and for the Tesoro refinery in Nikiski. All Cook Inlet oil production is refined locally. Exploration may lead to production and future tax revenues and job opportunities. It will also stem the decline of local energy supplies.

Availability of clean burning natural gas to heat homes and businesses and to generate low cost electricity helps families save money, and helps communities meet public health and safety needs.-Maintaining a tax and employment base is of critical importance to Cook Inlet communities as existing oil and gas reserves are depleted. Finally, areawide leasing does not sacrifice habitat protection or muzzle private property concerns. To the contrary, technology and tougher standards have reduced impacts to the environment, and the public has a greater opportunity than before to be involved in the oil and gas leasing process.

# **B. Public Hearings**

# 1. Issues Raised

Sale Area and Best Interest Finding	
The 10-year best interest finding is a cost- effective way for the state to operate. Areawide leasing provides a predictable regulatory environment for business to operate. Knowing what land is available is critical element needed to allocate investments in Alaska vs. other parts of the world. Companies are interested in areas that have been leased before because improvements in 3D seismic, extended-reach drilling, horizontal drilling, platform design, production facilities, and other areas have reduced field development costs and increased the chances of finding new fields. Areawide leasing increases the economic attractiveness of Alaska to the independent sector of the petroleum industry, and it supports the vision of the state's leadership to open the door for new operators.	Areawide leasing strategy is described in Chapter One. See response to Issue 10.
Although the legislature unanimously approved Areawide leasing, Cook Inlet was not contemplated as being an Areawide lease when the bill went through the legislature.	The sponsor statement for HB 388 envisioned areawide leasing "could be offered onshore of the Arctic Slope and eventually for portions of the Cook Inlet." Senate Concurrent Resolution 20 concludes with "[b]e it resolved that the Alaska State Legislature endorses the State of Alaska's areawide leasing program for the Cook Inlet, North Slope and Beaufort Sea regions."
Annual comment periods will allow people opportunity to comment.	Each year, DO&G will solicit any significant new information about the sale area's uses and resources, through a 60-day public comment period.
Leasing brings at least three benefits: natural gas to heat homes, electricity of which 80 percent comes from natural gas, and low taxes.	Cook Inlet energy supply and demand is presented in Chapter Four. Effects on municipalities and communities, and fiscal effects are discussed in Chapter Seven.
The sale area is too large. The sale area is so large; the BIF should be larger. Lease with smaller blocks.	Of the 4.2 million acres within the sale area, only 2-3 percent have not been offered before. The purpose of areawide leasing is to provide

	an established time each year that the state will offer for lease all available acreage within a geographical area. The result will be a stable, predictable leasing program, which will allow companies to plan and develop their exploration strategies and budgets years in advance.  Offering smaller sales is less economical and less efficient. In the past, industry would nominate acreage to be included in an oil and gas lease sale only to find that when the sale actually took place two to three years later, their interest and priorities would have shifted to a different area. One of the reasons why the legislature amended AS 38.05.035 and encouraged areawide leasing was to resolve this problem. With areawide leasing, all available acreage will be offered, after public comment, on an annual basis. The best interest finding discusses all topics required by AS 38.05.035(g).
The public is not able to meaningfully comment on the sale during the ten-year finding. The public process is not open. Leasing is forgone conclusion	Public involvement in the lease sale process is described in Chapter One.
Disappointed with the outcome of the stakeholder process. The oil industry representative blocked consensus on every substantive issue and only offered to sanction items that were already existing requirements.	The stakeholders process for the Cook Inlet Areawide Sale built on the recommendations of the Sale 85A stakeholders process and reached consensus on many of the same recommendations. These include:  1) Increased efforts by ADNR to communicate with property owners in the lease sale area.  2) Clarification of when exemptions will be granted for mitigation measures.  3) Notification of property owners within ½-mile of a planned lease action.  4) Extension of the public comment period.  5) Encouraging local hire.  6) Producing better maps.  7) Assuring that lessees meet their financial responsibilities.  8) Encouraging energy conservation.  9) Establishing a water quality monitoring database for Cook Inlet.  10) Establishing a water quality monitoring tax credit for Cook Inlet.

	11) Examining the historical pattern of oil and gas development as part of the cumulative effects analysis.  Stakeholders also suggested changes to mitigation measures during their deliberations. All recommended measures reached through consensus by the stakeholders have been adopted. Mitigation measures become part of the lease, which is a contract between the lessee and the state. See section on Cook Inlet Areawide Process, Chapter One.
Participant in the stakeholder process feels the finding reflects the intent of the stakeholder group.	See response above.
Remove all special sensitive areas, critical habitats, wildlife refuges, wetlands that are of extreme value, subsistence areas. Delete Deep Creek and Ninilchik River. Delete private parcels from leasing. Delete all acreage south of Ninilchik. Keep tracts from Ninilchik-south in the sale. Game refuges and recreation areas should be deleted from the sale area, not just closed to surface entry. Delete Susitna Flats. Delete areas of no industry interest.	See response to Issue 3 in Section A "Common Issues."
Although it was scaled back, the sale boundary still includes the Kachemak Bay watershed. Why were southern Kenai Peninsula tracts, deleted last year, put back in?	It was the intention of the administration to delete the southern peninsula tracts from Sale 85 A-W until the stakeholder process for the Areawide Sale was completed. Upon completion of stakeholders process the offshore southern peninsula tracts were included in the Areawide Sale so they could go through the public process. The offshore tracts from approximately Anchor Point, south, were deleted and are not in the sale area.
Grant no exceptions to mitigation measures.	The Director's decision whether to grant an exception will not be made without review by the public and appropriate state agencies, as noted by the asterisks after some of the measures. The mitigation measures for this sale do not allow exceptions for all measures. Only seven of the 31 mitigation measures for the Cook Inlet Areawide sale allow exceptions.

There have been no comprehensive studies about the effects of oil and gas on Cook Inlet.	Studies of the effects of oil and gas activities, principally discharges to the marine environment are presented in Chapter Five.
Cumulative impact analysis should include all available data, both past contamination and existing activities, traditional knowledge, and should also include non-oil and gas sources, such as municipal discharge, clear-cutting, dry cleaners.	ADNR has fulfilled the requirements for addressing cumulative effects of leasing as required under AS 38.05.035(g). See Chapters Five, Six, and Seven of the final Finding. ADNR believes the analysis of effects presented is comprehensive and adequate enough for the Director to determine whether this sale, as configured with mitigation measures and lessee advisories, is in the best interests of the state of Alaska. ADNR has fulfilled the requirements of KPBCMP policy 2.7 through this document and through the document "Revised Proposed ACMP Consistency Determination for Proposed Cook Inlet Areawide Oil and Gas Lease Sale (formerly Sale 85)." This determination was issued October 9, 1998, and is adopted here by reference. See also Alaska Coastal Management Program Consistency Analysis Regarding Proposed Cook Inlet Areawide Oil and Gas Lease Sale, March 31, 1998.
Define "significant new information."	Significant new information has no precise legal definition. However, it must be credible, information, preferably backed up by scientific studies or other evidence. It is not opinion or anecdotal evidence. It must be relevant to oil and gas leasing, exploration or development and have the potential to alter the balance when making a best interest determination.
How much of the proposed sale area is affected by the legislature's passage of the royalty reduction bill (and subsequent override of the governor's veto)?	None. The legislation applies to specific known fields.
How and when is the royalty rate set? What will the royalty be based on and can it vary? How are the fiscal benefits distributed?	Prior to approving a lease sale, the royalty rate is set by the commissioner of ADNR after reviewing a pre-sale analysis prepared by ADNR geologists, geophysicists and economists of the economic potential of the area. The royalty rate set for a lease sale is restricted by Alaska statute to be not less than

12.5% in amount or value of the production.

The royalty set by the commissioner is based on a presale analysis of the lease area. The royalty can be a fixed percentage in amount or value of the production, or a sliding scale, as determined by the commissioner prior to the sale.

Royalties from oil and gas leases are distributed in varying proportions depending on the lease to three different funds: the General Fund, the Permanent Fund, and the School Fund. Settlements for past royalties, in general, are distributed to the Constitutional Budget Reserve Fund. For example, in FY98, the state received \$795.6 million in bonus, rental, royalty and settlement revenues. The revenues were allocated as follows: \$503.3 to the General Fund, \$228.9 million to the Permanent Fund, \$4.0 million to the School Fund, and \$59.4 million to the Constitutional Budget Reserve Fund.

## Social and Economic Impacts

Industry provides a large portion, approximately 30%, of the tax base of the Kenai Peninsula. The support industry in the Kenai area had a work force of approximately 600 last summer and had a 93 percent local hire rate. The only non-residents brought in were specialty welders for certain alloys. Cook Inlet area companies employ more than 1.600 workers on staff and hundreds more on contract. Natchiq and our 2,000 employees fully support Areawide leasing. Oil and gas production and manufacturing employment for the Kenai Peninsula is approx. 1,500 people generating an annual payroll of \$97 million. Hundreds of people's jobs depend on finding additional gas supplies. Unemployment on Kenai Peninsula is 16.6 percent compared to the state average of 8.8 percent, so you can see how critical jobs are there to the local economy.

See response to Issues 1 and 10 and Chapter Seven, "Fiscal effects," for a discussion of employment.

The number of oilfield services industry businesses in Alaska declined by approximately 33% over the last 7 years. But,

Commercial uses of the sale area, including industry and trade are described in Chapter Four. Additionally, cumulative history of oil

companies of all sectors of the economy come and go, not just oil companies. For example, Mark Air.	and gas activity in Cook Inlet is presented in Chapter Six.
Oil companies invest in millions in preparation for lease sales. This is like the fishing industry investing in millions in permits and equipment.	Fiscal effects on industry investment are discussed in Chapter Seven.
Greater Wasilla Chamber of Commerce resolution in support of the sale. The City of Wasilla passed resolution 98-01 in support of the Areawide lease sale. Wasilla City Council supports the sale and the best interest finding process. Mat-Su Resource Conservation and Development Council resolution in support of Areawide leasing. Alliance resolution in support of the Areawide sale. Kenai Peninsula Fisherman's Association supports Cook Inlet Areawide Lease Sale. Communication and the Stakeholder process helped bring that support. Alaska State Chamber of Commerce resolution supporting Cook Inlet Areawide Leasing. CIRI is in favor of the sale, and the areawide leasing process. Areawide leasing will increase the value of CIRI's 1.5 million acres in the sale area, as well as improve industry's ability to lease an entire prospect at the same time. Chugach Electric Association supports the sale. Chugach relies on the gas from Cook Inlet to provide services from Fairbanks to Homer. The public overwhelmingly supports leasing as evidenced by Dittman poll.	See response to Issues 1 and 10.
Natural Gas Supply and Demand	
Shortage of natural gas is imminent. Need to explore for new reserves. If high-value areas are not available for exploration, then utility costs will rise. This region will experience annual shortages of natural gas as early as 2004 and it is unlikely that NS gas will be flowing that soon. With 2/3 of our Cook Inlet gas is being exported. If we didn't export our natural gas, we wouldn't face the gas shortages until 2014. We can't count on it North Slope gas unless it can be delivered 97,000 customers in Southcentral Alaska are dependent on Cook Inlet natural gas to heat their homes and businesses. Even more people are dependent on Cook Inlet natural gas to generate their	See response to Issues 1 and 10.

electrical energy. Ninety percent of the electric power Chugach produces comes from natural gas. Concerned about the availability of gas to heat homes, power electric utilities and keep Unocal fertilizer plant running at capacity. Consumers of natural gas-generated electricity are concerned about price and reliability. Consumers do not want a shortage of natural gas, and therefore support the sale. Residential gas prices in Anchorage and surrounding area are 40 percent below the national average. In 1995, the national average for residential natural gas was \$6.06 per mcf, and Anchorage area residents paid only \$3.61/mcf. Cook Inlet gas is isolated from the rest of the world can't import or export it inexpensively.

#### Habitat Protection and River Buffers

Stream buffers should be site-specific.

River buffers should include tributaries of the Anchor River. King Salmon live in the smallest channels. Establish half-mile buffers on upper tributaries as well as the main stem of the rivers. Keep development facilities out of flood plains.

After extensive discussions with ADF&G, numerous riparian buffers have been adopted for this sale. Mitigation measure 6 prohibits facility siting within 500 feet of any fishbearing lake or stream, and establishes ½-mile facility siting buffers along major rivers of the sale area. Mitigation measure 17 protects anadromous fish habitat and ensures fish passage.

River buffers, specifically Harriet Creek, should also include protection of mouth and tidal flats and avoid facility siting at set gillnet sites.

Mitigation measure 19 prohibits disposal of wastewater into freshwater bodies, intertidal areas, or estuarine waters unless authorized by NPDES and/or state permit, and prohibits the disposal of produced waters in these areas altogether. Mitigation measure 15 provides that the commissioner will restrict lease-related use when he or she determines it is necessary to prevent unreasonable conflicts with subsistence harvests and commercial fishing. Restrictions may include alternate site selection, requiring directional drilling and seasonal restrictions. Mitigation measure 7, which was recommended by the Cook Inlet stakeholders, requires that the siting of facilities in sensitive habitats be limited to the extent possible. Additional measures to protect river mouths, tidal flats, and set gillnet sites can be imposed during the permitting process, when specific activities are proposed for specific locations. Permits in these areas will be subject to ACMP

	and public review.
Concerned about geophysical hazards in this area, including earthquakes, volcano, tsunamis, flooding, three to twelve foot ice floes, currents, high tides, sediment hazards, coastal erosion, marine and seafloor hazards, volcanogenic flooding, and navigational hazards.	Geophysical hazards are discussed in Chapter Five.
Stakeholders should identify areas where drilling, and the risk of a spill, should not take place.	Sensitive areas are identified in the Cook Inlet Subarea Contingency Plan to anticipate where protection booming may need to be placed in the event of a spill.
Drift River terminal doesn't have a good environmental cleanliness track record.	Transportation is discussed in Chapter Five. Drift River spill records indicate that between 1973 and 1997 the facility has spilled about 133,400 gallons of various petroleum substances. That averages about 55.6 gallons per year which is a little over one barrel a year.
Spill prevention and response capability are adequate.	CISPRI (for crude oil facilities) and Chadux (for non-crude) have greatly improved the level of spill response in the Cook Inlet, and these response organizations continue to seek better prevention and response technology.
Why aren't double-hulled and escort assisted tankers required in Cook Inlet?	The Oil Pollution Act of 1990 requires that double-hulled tankers be phased in by 2015.  The U.S. Coast Guard regulates marine vessel traffic. The Coast Guard, in a March 24, 1997 letter stated, "There is no historical justification for an escort system for Cook Inlet, nor is there sufficient risk posed by the tanker fleet that presently operates." The letter went on the say that a standby tug for lower Cook Inlet would be welcome to benefit navigational safety and fire fighting capability for all marine traffic, however it should not be provided by and for only crude oil shippers. The Coast Guard indicates that tramp ships, not crude oil tankers, lend to have the most frequent problems. The funding for a standby tug remains to be resolved.

DEC has testified that they do not have enough manpower to properly inspect production operations.	Oil spill prevention and response is discussed in Chapter Five. AOGCC and ADNR also inspect facilities. See also Chapter One for regulation of petroleum operations.
Protect Kenai Peninsula brown bear denning areas, rearing areas, and feeding areas.	See response to Issue 6 in Section A "Common Issues."
What is the status of the KP brown bear population?	
Accelerate efforts to have a statewide database to monitor water quality throughout the inlet.	ADNR is developing a database that will be available for use in future Cook Inlet sales.  ADNR has received funding from the <i>Exxon Valdez</i> Oil Spill Trustees' Council to develop an integrated database containing digital environmental and spatial data for the Cook Inlet watershed. The system will facilitate access to significant amounts of disparate data from a wide variety of sources as well as base data sets important to understanding the environment of the watershed. For more information visit the website:  http://www.dnr.state.ak.us/ssd/ciimms/index.html
New technologies, better drilling practices and smarter production facilities have reduced environmental impact.	The "footprint" of development has been reduced over the years. See Chapter Six for a description of exploration and development phases.
Does NPDES permit allow onshore produced waters to be discharged offshore?	No. Only produced waters from existing offshore platforms may be discharged into Cook Inlet under the National Pollution Discharge Elimination System (NPDES) permit. Discharges authorized by EPA and ADEC under this permit system are described in Chapter Five. See response to Issue 9.
Contaminated Sites	
Before proceeding with leasing, create a bond requirement for operators to pay for damages to homes and property, including damages to domestic wells from drilling.	State law ensures that the surface owner be compensated for any damages to private property (AS 38.05.130). This law requires the state or its lessee to pay full payment for any and all damages sustained by the surface landowner. The state or lessee may enter upon the land only after posting a surety bond and

	only after notice and an opportunity for the landowner to be heard. The bond must be sufficient to pay the damages, and to institute legal proceedings to determine the damages which the owner may suffer.
Oil drilling mud waste pits north of Kenai have contaminated property owners' drinking water.	With respect to reserve pits, until regulatory reforms of the 1980s, it was common practice to discharge waste onto the ground. Modern reserve pits are called solid waste mono-fills and are permitted by ADEC under 18 AAC 60. The modern designs provided improved containment and thereby increased protection of groundwater. Existing soil and groundwater contamination is discussed in Chapter Five.
Some homes in Anchor Point have contaminated wells from leaking underground storage tanks. Concerned about the lack of drinking water sources in the area, and about additional damage to water supplies as a result of this sale. Why hasn't the state or KPB identified where the clean aquifers are?	Information on known groundwater resources of the sale area is presented in Chapter Two. Existing soil and groundwater contamination of the sale area is discussed in Chapter Five. Cumulative effects of this sale on water quality is discussed in Chapter Five. For more information, contact ADEC Division of Environmental Health, Drinking Water Protection Program.
New gravel pits and recent logging have caused increased erosion on the Kenai Peninsula. Water tables have dropped in domestic wells and there are wells going dry in the Anchor Point area. What effects will leasing have on water tables?	Effects of oil and gas activities on land habitat is discussed in Chapter Six. Cumulative effects of the sale on water resources is discussed in Chapter Five. Industrial pumping of shallow aquifers could cause a lowering of the water table in nearby domestic wells (see section on drawdown). Industrial use of water requires a permit from ADNR, DM&WM. Permits may contain stipulations on the use and quantity drawn of water in order to protect recreation activities, navigation, water rights or any other substantial public interest. Water use permits may also be subject to conditions, including suspension and termination of exploration activities, in order to protect the water rights of other persons. Before a permit to appropriate water is issued, ADNR considers local demand and may require applicants to conduct aquifer yield studies. Most domestic wells on the Kenai Peninsula tap an upper unconfined aquifer, but water can be found at much greater depths. Water yields necessary for industrial purposes are generally not available in the

	shallower aquifers.
Clean Water Act violations of existing Cook Inlet operators should be considered.	Current waste disposal practices are described in Chapter Five. ADNR does not assume future activities will be in violation of existing laws and regulations that regulate oil and gas activities.
Poppy lane is an example of pollution caused by the oil industry. West Poppy Lane site is not remediated. Families were forced to move from their homes, many of them now suffer health problems. A site in the Kenai Gas Field two miles from West Poppy lane has concentrations of total petroleum hydrocarbons in a wetland where caribou calve, and the caribou population on the Kenai Peninsula has been declining. The Sterling Special Waste Site has not been remediated. 70,000 tons of PCB-contaminated soil from a blowout at the compressor plant have been spread over the roads in the Kenai National Wildlife Refuge, and has not been fully remediated. The Swanson River field has wells where on-site disposal of drilling wastes have been disposed in wetlands. Tesoro dumped 616,000 gallons of oil beneath its facility that's now moving towards Cook Inlet. This site is not remediated. There has been no comprehensive investigation of these sites or an assessment of the extent and nature of this contamination. The state has failed to take action.	All of these sites have been investigated by the state and the extent of contamination has been assessed.  Contamination of the Poppy Lane gravel pit, near Soldotna, occurred before environmental regulatory reforms and was caused by many sources, not just oil and gas. From 1965 to 1985 the pit was used as a disposal site for unknown quantities of construction materials, drums, drilling muds, petroleum waste products, and residential refuse. The privately owned adjacent farm yard property has experienced groundwater contamination. The Poppy Lane gravel pit is still undergoing active cleanup. The known contaminated soil areas have been excavated and remediated based on a risk analysis to less than 1000 ppm of Diesel Range Organics. Artificially created wetlands & phytoremediation (similar to bioremediation except that is utilizes plants to cleanup water) is being used to address remaining groundwater contamination. Once the contaminated soil was removed, the groundwater mearly met cleanup standards. Groundwater mearly met cleanup standards. Groundwater monitoring is ongoing and will continue for 5 years after construction of the wetlands is completed. Only one home downgradient from the Poppy Lane site (Hardy House) was shown to be affected by contamination from the pit. Marathon, the owner of the site, drilled a new water well and eventually purchased the property. The remaining homes around the facility are on the upgradient side of the site. Testing by ADEC and EPA did not show contamination of the wells on these properties. However, because of property owner concerns Marathon purchased the properties. They then cleared the sites, backfilled foundations, filled or pulled septic systems and abandoned wells on the properties.

According to ADEC, some of the Poppy Lane waste was stored within a reserve pit at the Kenai Gas Field. This waste has long ago been removed. All the reserve pits in the Kenai Gas Field have been cleaned up or are contained. Ongoing water quality monitoring is being conducted. The Kenai Lowlands Caribou Herd population is not declining, but has increased in recent years (see Chapter Three for a description of caribou populations in the sale area).

The Sterling Special Waste Site cleanup has been completed except for groundwater monitoring. The facility pits were dewatered and capped in the late 1980's. From an inspection report dated 1996 it was stated "The closure cover appeared to be stable and revegetation was established....". Groundwater monitoring has continued since closure to assure that the closure is protecting against further contamination and residual contamination is dissipating. Residual contamination in the form of elevated nitrate. sulfate, chloride, barium, nickel and lead, as well as low levels of Volatile Organic Carbon concentrations have been detected. Though detected, the levels meet water quality standards and cleanup levels, according to ADEC. The monitoring has been scaling back due to the expected results that support the site closure is effective. Monitoring will occur for at least three more years at which time the level of monitoring will be reevaluated.

Under mitigation measure 6, Surface entry will be prohibited on state lands within the Kenai National Wildlife Refuge.

The Tesoro Refinery is covered under a RCRA permit and is presently going through corrective action (CA) for groundwater contamination. Soil contamination corrective action will follow. Currently, CA plans are being developed to address the bluff seepage. The bluff seepage is in the Phillips-Marathon (PM) area. For the November 97 - January 98 period, the PM system recovered 39,400 gallons of product and 27, 201,100 gallons

	water. The product was piped back to the refinery. The water was treated and discharged through a permitted system. The cleanup is expected to continue for a long period of time.
Of the 516 Cook Inlet area spills, which were reported in 1997 to ADEC, non-oil and gas industry entities accounted for 90 percent whereas the oil and gas industry accounted for 10 percent.	Most human-caused contamination is from leaking underground storage tanks. See section on existing contamination, Chapter Five.
Force the oil companies to clean up their mess before you allow this lease sale to go forward.	For a discussion on clean up of existing contaminated sites and reserve pits, see Chapter Five.
Has the technology progressed to the point where they don't need waste pits anymore?	Yes. In areas with appropriate subsurface characteristics, modern drilling technology allows for subsurface injection of drilling muds and cuttings. However, this technology can not be used in all areas so surface reserve pits for disposal are still sometimes required. With respect to reserve pits, until regulatory reforms of the 1980s, it was common practice to discharge waste onto the ground. Modern reserve pits are called solid waste mono-fills and are permitted by ADEC under 18 AAC 60. See mitigation measures 18 and 19. See also Chapter Five for a discussion of waste disposal practices.
Alternative Energy Development	
The state should develop a long term energy strategy to deal with the time the gas runs out. Use of non-natural gas fuels to provide energy for Anchorage is less environmentally preferable. Wind and solar energy technology does not currently exist to provide enough energy to areas now supplied by natural gas. Not everybody is committed to total electric energy, as evidenced by the smell of wood and coal smoke in the air. Develop alternative energy such as use of Cook Inlet tides, the sun, and wind.	See response to Issue 2 in Section A "Common Issues."
Private Property Rights	
Some say oil companies can drill a well in your back yard, but here's never been a case in Alaska where an oil company has gone onto	See response to Issue 4 in Section A "Common Issues."

private property without the owner's permission.	
Notifying only the nearest 25 property owners won't protect private property rights. All property owners within one-mile of proposed development and drilling should be notified.	As noted in response to Issue 4, all property owners within ½-mile of any proposed drilling activity will be notified. This is consistent with the notification requirements of the KPB and greater than the MOA notification requirements for proposed activities.
When something is done within the Municipality of Anchorage, that's going to affect a neighborhood, every property owner within ½-mile has to be notified by the MOA; it's the law.	The MOA provides notification of public hearings to every property owner within 500 ft. of a proposed conditional use approval and modification, site plan approval and modification, variance, zoning, or subdivision action, under AO 21.15.005.
Need conditions on the leases so surface owners have some say in how the leases are developed.	Mitigation measure 29 specifically requires that when surface activities are proposed on private land, the lessee must submit to the private surface owner a plan of operations (as required by 11 AAC 83.158) that describes the lessee's efforts to minimize impacts on residential areas and privately-owned surface lands. See Issue 4.
Private property owners have no legal recourse if companies want to develop.	State law ensures that the surface owner be compensated for any damages to private property (AS 38.05.130). This law requires the state or its lessee to pay full payment for any and all damages sustained by the surface landowner. The state or lessee may only enter upon the land only after posting a surety bond and only after notice and an opportunity for the landowner to be heard. The bond must be sufficient to pay the damages, and to institute legal proceedings to determine the damages which the owner may suffer.  Where existing law cannot, lease mitigation measures address property owner concerns. All property owners within ½-mile of any proposed drilling must be notified. Additionally, two measures and an advisory address protection of private property rights. Lessees must include in their seismic permit applications a plan for notifying the public of their activities. Where surface activities are proposed on non state-owned land, lessees must submit a copy of the

	plan of operations to the private surface owner. Plans of operation must describe the lessee's efforts to minimize impacts on residential areas and privately-owned surface lands. Plan of operations permit applications must describe the lessee's efforts to communicate with local communities, and interested local community groups, if any, in the development of their plans.  See Issue 4 in Section A "Common Issues."
Other	
Mass showings of people unified in their concern for this area had little or no affect on the sale area.	For a description of public involvement in the development of this sale, see Chapter One. ADNR carefully considered all oral and written comments regarding this lease sale decision. No public input has been ignored. ADNR takes the comments of residents seriously and includes them in the best interest finding. Comments and information received during the sale process are used to determine the final sale configuration and to draft appropriate mitigation measures to ensure that values are protected. ADNR also considers foreseeable long-term impacts and attempts to balance the concerns of individuals with the best interests of the state. In some cases, when concerns outweigh benefits, tracts have been deleted from a sale. In response to the concerns voiced in Homer, several tracts close to Homer and Kachemak Bay have been removed from the original sale area. ADNR is aware of opposition to the sale from some people on the Lower Peninsula. However, the sale also has a great deal of support, and ADNR must consider the best interests of the entire state in making its decision.
There has never been a demonstrated need for you to sell this land on the Kenai Peninsula.	See response to Issue 1 and the ACMP analysis.
Mat-Su needs zoning regulations in place before the sale takes place.	The Mat-Su Borough has zoning regulations in place (Title 17). However these may not apply to all portions of the sale area. DNR has included proposed Lessee Advisory 6 which reads: "In populated areas where there is no local planning and zoning, DNR may require approval of plans of operation that permanent

	structures be designed to be compatible with the aesthetics of the surrounding area."
Tourism will also be adversely affected by the sale.	Considering that petroleum revenues are spent on tourism-supporting infrastructure, such as roads, campgrounds, and public facilities, it follows that oil and gas activity indirectly supports the tourism industry. Infrastructure development provides a source of oil and gas property taxes which are spent on new or existing recreation support facilities, like parking lots, camp sites, and rest rooms. Oil and gas revenues contribute to the development of tourism throughout Alaska by funding marketing efforts, airports, roads, docks, state parks, campgrounds, recreation areas, and preservation of historic sites. Effects on uses of the sale area, including tourism and recreation, are discussed in Chapter Five.
Proposed sale will result in increased crowding. Residents have lost fishing holes because of the tourists. Delete commercial fishing and subsistence use areas from sale.	Effects of the sale on commercial fishing are discussed in Chapter Five. Effects on sport and subsistence fishing are discussed in Chapter Six.
ACMP consistency analysis inappropriate. Lake & Peninsula Borough and Kodiak Island Borough should be included because they would certainly be impacted by an oil spill.	An oil and gas lease does not authorize any exploration, development or production activities. Leasing may result in future projects that cannot be predicted or planned with any specificity at the initial lease sale phase. AS 46.40.094(b) allows phased review of projects that are subject to additional ACMP review and permitting in the future, including activities that result from a lease sale. Thus, affected coastal districts include only those that would be directly impacted by activities resulting from the lease sale. These activities could include exploration, which ends with the drilling of exploration or possibly delineation wells, but do not include development, production or the transportation of crude oil which could result in an oil spill that would affect other districts. At the lease sale phase the only reasonably foreseeable districts affected by the Cook Inlet Areawide Sale are those of the KPB, MOA and MSB.
There should be a search of potential lessees of their record for compliance with lease	Enforcement is done through site inspections by DO&G permitting staff. DO&G also relies

provisions. Non-compliance should be grounds for lease forfeiture.	on reporting of violations by the general public. Leases may be suspended or revoked if violations are brought to the attention of the division, and not corrected.
	division, and not corrected.

## 2. Participants

#### Soldotna, Central Peninsula Sports Center, 4/27/98

Chris Myers Tom Stroman Karl Kircher, *Kenai Peninsula Fisherman's* Dan Ungrue *Assn.* Brent Senette

Peggy Mullen Bill Stamps, Alaska Support Industry Alliance

Robert T. Peterkin III Jim Evans Penny Vadla Wayne Cissell Woody McCubbins Ken Turnage Jeff Kilfoyle **Dwight Johnson** Ron Cordle Morgan Clark James Price Allen Dorman Bruce Passe Jimmy Hart Judy Brady, AOGA Dennis Steffy John Amundson Lisa McCubbins

Jerry Booth, CIRI Kate Corrigan, Anadarko Petroleum

Mark Flagg, Marathon Oil Co. Corporation

Robert Bumbaugh Tom Lovas, Chugach Electric Association
Don Erwin Phil Steyer, Chugach Electric Association

John Admire, *Phillips Petroleum Company* Harry Eaton

Jack Mize Kathryn Thomas, Alaska State Chamber of

Dean Kvasnikoff Commerce

## Palmer, Mat-Su Borough Assembly Chambers, 4/29/98

Wayne Carmony, Greater Wasilla Chamber of
Commerce
Doug Smith, Mat-Su Resource Conservation
and Development Council
Jenine St. John, Lynden Logistics
Kevin K. Bruce
Rick Cross
Kathleen Heckel
Jerry Booth, CIRI
Kevin Tabler, UNOCAL
Nancy Michaelson
Robert B. Fisher
Sandy Otto
Jeff Carney

Steve Trudell Sarah Palin, Mayor of Wasilla

Bill Barron Dianne M. Keller

Mark Flagg, Marathon Oil Co. Dave Lappi, Growth Resources

Brent Senette Jim Colver
Mark Susich Ed Becker
Mike Stover Larry DeVilbiss

Judy Patrick Bill Long, Palmer Soil and Water

Dave Chappell Conservation Board

Brit Lively Kirsten Gamel

#### Anchorage, Steller School, 4/30/98

Peter Zseleczky
George Buck
Dan Thomas
Mark Flagg, Marathon Oil Company

John Cooley, Chugach Electric Association
Melissa Riggan, Aurora Power Resources
Mark Flagg, Marathon Oil Company

Joel Alnes, UNOCAL Jim Sykes, Oilwatch Alaska

Tom Waldock, ENSTAR Natural Gas Company
Steve Trudill
Lyndon Ibele
Gary Ford
Charles McKee
Paul Glavinovich
Brent Senette
Stacy Marz, Trust

Gary Ford Stacy Marz, Trustees for Alaska
Mike Stover Bob Randall, Trustees for Alaska
Kathleen Heckel Don Deitz, Port of Anchorage
John Miesse Marty Hrachovy

Carl Portman

Bob Bailey, Anchorage Chamber of Commerce

John Barnes Pamela A. Miller Ken Freeman, *Resource Development Council* Marilyn Crocket, *AOGA* 

Mark Major, ARCO Alaska Inc. Stanley Jacobs

Joel Blatchford, Cook Inlet Marine Mammal Mary Shields, Northwest Technical Services

Council Tom Lakosh Keith Burke, Natchiq Corporation Mark Susich

Janet Daniels Pamela K. Miller, *Alaska Community Action on Toxics, Alaska Conservation Foundation* 

## Homer, Homer Elks Lodge, 5/7/98

Frank Griswold

Laurie Daniel, Kachemak Bay Conservation Bill Stamps, Alaska Support Industry Alliance

SocietyNina FaustDaniel WinnLinda FeilerBob Shavelson, Cook Inlet KeeperRichard BremickerHal SmithDon Bailey

Marla McPherson Findlay Abbot
Daniel Zats Nancy Hillstrand
Mike O'Meara

## C. Written Comments

#### 1. Local Government

## Kenai Peninsula Borough, Rachel Clark, 6/23/98

The KPB Planning Commission has found the proposed Cook Inlet Areawide lease sale consistent with the KPB Coastal Management Program with the following recommendation:

Adopted and incorporated into ADNR's notification procedure.

Change the public notice requirements to every individual listed on the KPB property tax rolls within ½-mile of any proposed drilling, rather than the closest 25 people.

## Matanuska-Susitna Borough Planning Department, John Duffy, 6/26/98

Enclosed resolution Number 98-034 supports the development of oil and gas resources within the borough, if it is consistent with the MSB Coastal Management Plan, the Willow Sub-Basin and Susitna Area Plans, community comprehensive plans and applicable state land management plans. Additionally, the resolution requests the Division of Oil and Gas to consult with the cities of Wasilla and Houston and affected community councils.

The Cook Inlet Areawide sale complies with the MSBCMP. All future oil and gas activities must be consistent with all current and future ADNR area plans. See Chapter Nine on mitigation measures and lessee advisories. Mitigation measure 28 requires that plans of operation must describe the lessee's efforts to communicate with local communities, and interested local community groups in the development of those plans. The borough has found the sale consistent with the MSBCMP.

#### 2. State Government

## Representative Norman Rokeberg, Alaska Legislature, 6/29/98

Supports Cook Inlet Areawide leasing. House Bill 388 enabled the DO&G to proceed with the North Slope Areawide sale and implement the Cook Inlet Areawide sale process.

Comment noted. See response to issue 10.

The preliminary best interest findings appear to be thorough and inclusive of the Legislature's objectives in reforming Alaska's oil and gas leasing process. Comment noted.

The primary objective of leasing reform was to make lands available on a consistent and reliable basis. Given the \$55 million in bonus bids received at the first Areawide sale, it is clear that this leasing approach is a success.

Comment noted.

Making land available in Cook Inlet may generate new interest among both large international companies and small independent wildcat operators, thereby stimulating an industry currently in decline. This will create jobs, boost revenues of the state and local governments, and enhance the viability of existing oil and gas support businesses.

Comment noted.

Senate Bill 308, passed in 1994, established a phased process for oil and gas development. Before any drilling can begin, ADNR must approve a plan of operations permit. Administrative and public review is required by law at each stage of development. The public will have the opportunity to participate in the process in determining what is in the best interest of the state.

Comment noted.

The Legislature believes that streamlining the process and requiring only supplements to the Areawide finding will save the state substantial money and manpower. The enabling legislation accommodates the need for public involvement by calling for an annual public comment period to determine if conditions have changed. This should minimize vexatious litigation by extending the life of the finding.

Comment noted.

Arguments that this leasing program will exclude the public and lead to environmental harm are political in nature and are not based on sound science or prudent management of our natural resources. The Legislature formulates public policy for the State of Alaska and not environmental special interest groups. Areawide leasing will allow the application of new technology to previously offered lands and lead to discovery of valuable resources for the benefit of all Alaskans.

Comment noted.

## Alaska Department of Fish and Game, Lance Trasky, 6/29/98

Submits specific information on brown bears and waterfowl. Specific information on anadromous fish bearing streams within the State Game Refuges [SGR] and Critical Habitat Areas [CHA], the recreational saltwater salmon fishery off of Deep Creek, and the significant use of the Palmer SGR by waterfowl hunters was provided in our July 25, 1997 letter, but was not incorporated in Chapters Three or Four.

This information has been incorporated into the final finding. See Chapters Three and Four.

Recommends that the final finding include an evaluation that describes localized areas of fish and wildlife by incorporating ADF&G information that describes resources throughout the proposed sale area, particularly in the SGR's and CHA's.

This information has been incorporated into the final finding. See Chapter Three.

The department is concerned that human development is eliminating or altering areas that were once prime Kenai Peninsula brown bear habitats. Recommends following guidance from a brown bear conservation plan for this bear stock that will be available within six to twelve months.

See response to Issue 6 in Section A "Common Issues."

In the interim, recommends revising mitigation measure 26 to require bear interaction plans.

In the interests of the health and safety of both man and wildlife, it is prudent to prepare and implement bear interaction plans for some operations. A decision was made at elevations of this issue for previous lease sales that state policy remain to encourage rather than require the preparation of bear interaction plans. This policy remains in effect and applies to the areawide sale.

Recommends buffers around bear concentration areas along salmon streams and known den sites.

See response to Issue 6.

Recommends seasonally restrictions or prohibitions on exploration and development activities in brown bear movement corridors.

See response to Issue 6.

Mitigation for lower Kasilof River critical waterfowl habitat is missing. Recommends that surface entry into the critical waterfowl habitat

Adopted. See Mitigation Measure 22.

along the Kasilof River be prohibited, but directional drilling from adjacent sites may be allowed. This language was incorporated in Sale 74 and is consistent with measures for other waterfowl concentration areas in Cook Inlet.

Revise stipulation #21 in the lease form to clarify the state's requirement regarding removal and rehabilitation of abandoned facilities. This topic came up at a June 5, 1996 workshop with Division of Oil and Gas (DO&G) and the Alaska Oil and Gas Commission, and it was apparent that there are different interpretations of the language contained

In this lease provision. DO&G indicated that it interprets the term "rehabilitation" to include removal of the facilities. Some of the other workshop participants did not share that interpretation.

These concerns and recommended mitigation must be addressed in the final best interest finding to ensure the proposed sale can be found consistent with the standards of the ACMP, and the coastal policies of the KPB, the MSB, and the MOA.

There is no need to revise Paragraph 21 of the Lease Contract. This contract that has withstood the test of time. Site clean up and gravel removal is a routine event, however, DO&G retains the option to use other clean up and disposal techniques. Rehabilitation *may* include the removal of facilities at the option of the state.

DO&G has found the sale consistent with the standards of the ACMP including the policies of the KPB, MOA, and MSB. See the Final Consistency Determination for Proposed Cook Inlet Areawide Oil and Gas Lease Sale (formerly Sale 85). ADF&G concurred with the sale's ACMP consistency determination.

## 3. Federal Agencies

## National Marine Fisheries Service, Steven Pennoyer, 6/8/98

The Cook Inlet beluga whale is a species of concern which may be adversely affected by oil and gas development and justifies specific protective measures.

Effects of oil and gas activities are discussed in Chapter Six. In November 1998, NMFS initiated a status review of the Cook Inlet beluga whale to determine whether designation under the MMPA or a change of listing classification under the ESA is warranted. The review will give consideration to the current status of Cook Inlet belugas (distribution, population abundance and trends, reproductive parameters, food habits). The effects of the Native subsistence harvest, and the potential effects of other humanly induced impacts, as well as beluga natural mortality will also be examined (63 Fed. Reg. 64,228 (November 19, 1998)). ADNR is awaiting the results of that review. Lessees are advised that they must

Provides information on the Cook Inlet beluga stock. Annual aerial surveys conducted since 1991 indicate this population presently consists of 881 animals. All of these whales occupy the upper inlet during the summer months with major concentrations at mouths of several streams and rivers, specifically the Susitna River.

finding (Chapter Three).

This information has been incorporated into the

consistent with federal law.

comply with all applicable laws of the United States, including the MMPA and ESA. This finding may be amended to incorporate any new significant information about the status of the beluga whale. If warranted, new measures may be necessary to protect beluga whales,

The beluga whale can be very sensitive to noise, and have been observed to avoid small boats operating near Anchorage. Any activity that might disturb or cause these whales to abandon important feeding or calving areas would violate the Marine Mammal Protection Act.

Comment noted.

Beluga whales are also hunted by Alaska Natives with the most important hunting areas including the mouths of the Kenai, Susitna, Little Susitna, Ivan, Beluga, Eagle and Chikaloon Rivers. Activities which may harass or harm belugas, or which may adversely affect the availability of the species to subsistence hunters, must be authorized under the MMPA. These authorizations may be requested through the NMFS.

Subsistence harvesting of beluga whales is described in Chapter Four. If an operation or temporary structure were proposed in a river estuary an Incidental Harassment Authorization may be needed from the National Marine Fisheries Service (NMFS), so as to not violate the Marine Mammal Protection Act (MMPA). A provision of the harassment authorization is that the take will not result in an adverse effect on the subsistence harvest. Restrictions on vessel operations may be necessary depending on whaling captains' plans, and depending on the location and timing of proposed operations.

Recommends deleting tracts near the mouths of the above mentioned rivers. Also recommends deleting tracts at the mouths of Drift, Big, Kustatan, McArthur, Middle, and Chuitna Rivers, and Fish and Ship Creeks. According to Small and DeMaster (1995), the only documented human-caused mortality of beluga whales is subsistence harvesting. While DO&G does not believe tract deletions are necessary to protect beluga harvesting and access to beluga whales. It is possible there will be no proposals to conduct activities in areas in which belugas migrate and breed. Additional protection measures can be considered when plans of operation are reviewed.

Recommends that marine and tidal tracts of the Knik Arm of upper Cook Inlet be closed to surface entry. In-water disturbances could deter migration, feeding, and juvenile rearing behaviors in the restricted, narrow strait of lower Knik Arm.

Disturbance effects from drilling are discussed in Chapter Six. Subsistence fishing, recreational boating and sport fishing could also affect whale behavior. ADF&G participates in all oil and gas permit reviews and NMFS is also notified of all marine seismic applications. Additionally, if an operation or temporary structure were proposed in a river estuary, a permit would be required by the U.S. Army Corps of Engineers (USACE) under the Rivers and Harbors Act, a fish habitat permit would be required by ADF&G, and an Incidental Harassment Authorization may be needed from the National Marine Fisheries Service (NMFS).

Post-lease sale activities which may affect Essential Fish Habitat may be subject to the provisions of the Sustainable Fisheries Act of 1996, which requires consultation with NMFS. Submits Federal Register, Vol. 62, No. 244. Comment noted.

#### 4. Business

# Alaska Railroad Corporation, Governor Bill Sheffield, 5/28/98

Supports Areawide leasing. Oil and gas production in the Cook Inlet area helped make statehood possible. Strong earnings in recent years has helped the railroad run more safely and efficiently. This success will only be able to continue if our headquarters city has a strong and vibrant economy. Oil and gas production in Cook Inlet helps make that happen.

Comment noted. See response to issue 10 in Section A "Common Issues."

#### Anadarko Petroleum Corporation, Todd Liebl, 6/19/98

Supports Cook Inlet Areawide leasing .

Areawide leasing not only provides the State of Alaska the potential for saving tax dollars through reduction in redundant best interest determinations and more efficient use of manpower, it also increases the potential for growth of the oil and gas industry in the state. A consistent and predictable schedule of annual sales allows the oil and gas industry the ability to plan and develop exploration strategies to maximize two of its key assets, capital budget and manpower.

Comment noted. See response to issue 10.

#### ARCO Alaska, Inc., Michael A. Richter, 6/24/98

Supports Cook Inlet Areawide leasing. Hold lease sales on an annual basis. Do not further reduce the current aerial surface extent of the Sale.

Sales are scheduled to be held annually in August beginning in the year 2000. The sale area has not been reduced.

Recommends the leases not have greater than a fixed 1/6th (16.66667%) royalty rate. The fixed royalty rate will reduce the minimum economic reserve size required for each prospect such that industry can justifiably drill these prospects which may be smaller and have additional burdens. It will also encourage the development of a greater number of smaller discoveries that collectively will increase the amount of royalties paid to the state. Supports issuance of leases with a minimum of a seven (7) year primary term. This will allow lessees sufficient time to conduct activities and comply with all the mitigation measures set out in the lease.

There will be a fixed 12-1/2 percent royalty. The initial term is seven years. In selecting the bidding method for the sale, the department considered and balanced the following state interests: protecting the state's ownership interest in hydrocarbon resources, promoting competition among individuals seeking to explore and develop the area, encouraging orderly and efficient exploration and development; and the need to generate revenue for the state. See Chapter 10, "Bidding Methods and lease Terms."

Concerned about the growing operational restrictions on lease activities. Onerous lease provisions continue to lessen industry enthusiasm for participating in sales.

ADNR has worked closely with industry and state resource agencies to craft mitigation measures that strike a balance between development and environmental protection.

Regarding operational restrictions imposed by ACMP measures, provisions that purport to protect against events that have a miniscule chance of occurring while rendering exploration and development in Alaska uneconomic also troubles ARCO. Encourages the state to endeavor to promote community, wildlife and habitat values without unduly burdening environmentally responsible exploration and development in Alaska.

The ACMP was drafted in the 1970s when habitat protection was less than today. Some mitigation measures were created prior to new lower impact technology. DO&G welcomes ARCO's comments and participation in improving mitigation measures. DO&G evaluates mitigation measures annually following public comment periods.

## Associated General Contractors of Alaska, J. A. Fergusson, 6/23/98

Supports Cook Inlet Areawide leasing.
Offering the entire Cook Inlet region yearly helps reduce redundant Best Interest determinations.

As prescribed by law, best interest determinations are necessary to protect the public interest. Prior to areawide leasing, determinations for a sale area were made every five years. Now they can be made every ten years.

Approximately 97 percent of the 4.2 million acres within the sale boundary has been leased before. Many areas within the boundary, such as parks and wildlife refuges and Native corporation and Mental Health lands are not available for leasing in this sale

Comment noted.

The lease sale does not directly authorize exploration and development. More than 100 permits may be required from different agencies to develop a site. In addition, more than 80 mitigation measures and stipulations are attached to the sale.

Comment noted.

This new lease program eliminates inefficiencies and allows businesses to plan ahead. Under this new program, oil companies will have a better chance of securing exploration capital for Alaska projects to explore and develop new reserves, translating into jobs, local revenues, and a stable economic base.

Comment noted.

## Carlisle Enterprises, Inc., Harry McDonald, 5/15/98

Supports Areawide lease sale. Industry supplies large tax base and may lengthen state jobs.

Comment noted. See Chapter Seven, "Fiscal Effects."

#### Cook Inlet Region Incorporated, Telissa J. Yoder-Sickler, 6/5/98

Supports Cook Inlet Areawide leasing. Concerned with environmental issues, but no adverse impacts from oil and gas development have been found. Commercial and sport fisheries continue to flourish. Cook Inlet area companies employ more than 1,600 workers on staff and more on contract. Southcentral Alaskans depend on Cook Inlet for its energy resources.

Yes, there are potential adverse impacts. Toxic sites exist from improper or illegal activities of the 1960s and 1970. Now pollution laws are in place. Mitigation measures provide additional protection beyond existing laws. Fishing, fisheries and Southcentral economies are addressed in this finding.

## Cook Inlet Region Incorporated, Candace R. Beery, 6/16/98

Supports Areawide lease sale. Areawide leasing will benefit CIRI's shareholders and their families as well as all residents of Southcentral Alaska. CIRI has considered the possible risks of environmental impact that additional oil and gas development could have on Cook Inlet. Given the applicable federal, state regulations and recent technological advances, the risk of environmental contamination is more remote than when development began over 40 years ago.

This information has been incorporated into the final finding. See Chapter Seven.

## ENSTAR Natural Gas Company, Thomas Waldock, 4/30/98

Supports Cook Inlet Areawide leasing. Enstar's 97,000 customers depend on Cook Inlet gas to heat homes and businesses. Over half of Alaska residents rely on Cook Inlet gas to generate electricity. South central Alaska consumes and exports more than 200 billion cubic feet of Inlet gas each year. Based on known reserves, this region will experience annual shortages of gas as early as 2004.

The importance and role of local oil and gas supplies is addressed in Issue 1. This includes the need for new discoveries to replace existing known supplies.

A shortage can be forestalled in three ways. First is that North Slope gas will become available in time to help, but few are optimistic that that gas will be flowing by 2004. Second is to curtail current usage, however the economic impact of shutting down the LNG or fertilizer plant would be painful. Third and most preferable is to find new gas reserves. Areawide leasing is a step in the right direction.

Comment noted.

Areawide leasing allows for a predictable schedule of lease sales, thus making exploration investments less risky. Areawide will also mean fewer delays in bringing new finds into production.

See response to Issues 1 and 10 in Section A "Common Issues."

If significant quantities of new gas are found, low cost natural gas and electricity may be our welcome companions for another several decades. See response to Issues 1 and 10 in Section A "Common Issues."

#### Hawk Construction Consultants, Daniel J. Steffan, 5/2/98

Supports Cook Inlet Areawide leasing. Having spent time camping and fishing on the Kenai River, Homer, and Deep Creek, I have not seen any adverse impacts of oil and gas development. Oil and gas development is compatible with fishing and tourism.

Impacts on fishing and tourism are discussed in Chapter Five.

#### Jackson Construction, Harold Jackson, 4/26/98

Supports Cook Inlet Areawide lease sale. Previous lease sales have been modified to address environmental concerns. Mitigation measures may be modified following public review.

Do not make further deletions of habitat or privately owned lands. Existing precautions and safeguards are adequate to protect sensitive habitats. While surface activity and facility siting might be prohibited in certain identified areas, ADNR does not believe that acreage deletions are necessary to protect resource values.

### Kachemak Bay Wilderness Lodge, Michael and Diane McBride, 5/17/98

Opposed to lease sales. Wants oil and gas moratorium on lower Cook Inlet.

Based on this finding, the Director has determined that leasing in Cook Inlet is in the state's best interests as proposed and consistent with all applicable laws. A moratorium can only be executed by the legislature. See Issue 2, private property and the public interest.

Delete all critical habitat areas, wildlife refuges, commercial fishing areas, wetlands, recreational areas, and private property from the sale. See response to Issue 3 in Section A "Common Issues."

The cumulative impact from past and existing development needs looking at – there should be an analysis to see what this sale will do further as a foreseeable impact.

Comment noted. See Issue 8 in Section A "Common Issues."

There is already too much discharge into Cook Inlet. There should be no discharge allowed.

The federal government controls permitted discharges of all sources into Cook Inlet. ADEC must certify most discharges and sets pollution standards for all waters of the state.

Why isn't Alaska looking at alternative energy sources? We should be using renewable sources, and changing our energy policy.

In response to this issue of concern, division staff have been researching non-oil or gas energy sources as an alternative to this sale. At this time, alternative energy sources can not replace the energy and revenue derived from

	conventional oil and gas leasing.	
Lynden Inc., Jim Jansen, 5/18/98		
Supports Cook Inlet Areawide lease sale. Cook Inlet gas is important to Anchorage's economic future. Gas supplies residential power and heat, and helps fuel our economy.	Comment noted.	
Marathon Oil Company, John A. Barnes, 6/29/98		
Supports Cook Inlet Areawide leasing. Marathon is the largest natural gas supplier to Enstar and Chugach Electric in addition to large facilities like the Tesoro refinery, Providence Hospital, Alyeska Resort, Alaska Pacific University, Valley Hospital in Palmer, and all Fred Meyer locations.	Comment noted.	
Cook Inlet production has had a tremendous impact on the local economy. The natural gas used to heat our homes and generate electricity comes from Cook Inlet. The residential gas prices for natural gas in Anchorage and surrounding areas are 40 percent below the national average. In 1995, the natural average for residential natural gas was \$6.06/Mcf and Anchorage area residents paid only \$3.61/Mcf.	See response to Issues 1 and 10 in Section A "Common Issues."	
Oil and gas production and manufacturing employment for the Kenai Peninsula is approx. 1,500 people generating an annual payroll of \$97 million. Unemployment on Kenai Peninsula is 16.6 percent compared to the state average of 8.8 percent, so you can see how critical jobs are there to the local economy.	Comment noted. See Chapter Seven, "Fiscal Effects."	
Advances in technology such as 3-D seismic and new drilling techniques have renewed interest in leasing areas that were less promising before.	Comment noted. See Chapter Six, "Development Phases and the History of Drilling and Discovery."	
Routine oil and gas activities do not create a negative impact on the environment or wildlife. There has been continuous production from Cook Inlet for 38 years. Scientific studies do not conclude that there has been an adverse impact to the environment.	Comment noted.	

Raven Contractors Inc., Hugh Chumley, 4/28/98		
Supports Cook Inlet Areawide lease sale. The state of Alaska derives 80 percent of its revenues from the oil and gas industry, and the same industry provides the very foundation of our employment base. In the economic sense, "as goes the oil industry, so goes the State of Alaska." It follows that it is in the best economic interests of the state to adopt an energy policy containing approaches, like Areawide leasing, that provides for the cooperative, systematic, and environmentally responsible development of Alaska's oil and gas resources.	Comment noted.	
Offering a dependable continuity of lease sales in areas of promising exploration potential will help Alaska refined products compete in an open global market.	Comment noted.	
The Surveyor's Exchange, Larry Wilmuth, 4/30/98		
Supports Cook Inlet Areawide lease sale. Would like to see more exploration and development of nearby oil and gas reserves. Local production would provide the most benefit with the least risk.	Comment noted.	
Totem Ocean Trailer Express, Inc., Ted	Deboer, 4/29/98	
Supports Cook Inlet Areawide lease sale. Oil is and always has been a good neighbor and corporate citizen to all Alaskans.	Comment noted.	
Udelhoven Oilfield System Services, Inc., Milton Allen, 6/24/98		
Supports Cook Inlet Areawide lease sale. It is our goal to provide service to the oil and gas industry which creates jobs for Alaskans.	Comment noted.	
Udelhoven Oilfield System Services, Inc.	, James Udelhoven, 4/29/98	
Supports Cook Inlet Areawide lease sale.	Comment noted.	
Union Oil Company of California (Unocal), Rick D. Cross, 6/29/98		
Supports Cook Inlet Areawide lease sale. The discovery and development of new oil and gas reserves is very important to the success of our business and the economy of Southcentral Alaska.	Comment noted.	

#### Webb Business Consulting Services, William F. Webb, 5/4/98

Supports Cook Inlet Areawide lease sale. Alaska depends on continuous and successful exploration to fuel the economy. In order for any exploration program to be successful, land must be made available on a reasonable and expected basis. Move forward with Areawide leasing without additional administrative or regulatory rules attached that would diminish the positive effect on Alaska's economy.

Comment noted. See Issue 10. Administrative or regulatory rules are necessary to protect the environment and minimize potential impacts of the sale. Mitigation measures, and other administrative and regulatory rules applied to the Cook Inlet area, may change over time.

# The Wilson Agency, LLC, Lon G. Wilson, Anchorage, 5/21/98

Supports Cook Inlet Areawide lease sale. Continue oil and gas leasing, exploration and development to ensure that we have jobs and a sound economic future for our children. Comment noted. See Issue 10 in Section A "Common Issues."

#### 5. Organizations

#### Alaska Emergency Response Team (ALERT), Susan Alexander, 5/4/98

Opposed to Cook Inlet Areawide lease sale. Tourism is the future of Alaska, not oil.

ADNR believes that tourism and oil and gas development can coexist and support one another. The challenge is to balance these uses and to assure that development is done with minimum impact to the environment.

Delete all critical habitat areas, wildlife refuges, high value wetlands, subsistence areas, commercial fishing areas, recreation areas, and private land. See response to Issues 3 and 4 in Section A "Common Issues."

Prepare a cumulative effects analysis that considers the effects of past and existing development.

Cumulative effects are discussed in Chapters Five, Six, and Seven.

The cumulative effects analysis should consider all available data and traditional knowledge.

ADNR has considered all information, including traditional knowledge, relevant to this best interest finding. See response to Issue 8 in Section A "Common Issues."

Require zero discharge in Cook Inlet.

See response to Issue 9. Discharge and the effects on water quality are discussed in Chapter Five.

The state should develop an energy policy based on renewable energy sources such as wind, tidal, and solar power generation, using See response to Issue 2 in Section A "Common Issues."

the remaining oil and gas as an interim measure while shifting its energy reliance to renewable resources.

### Alaska Oil and Gas Association, Judith Brady, 6/29/98

Supports Cook Inlet Areawide leasing program. Submits Dittman Research Poll.

Comment noted. See Issue 10 in Section A "Common Issues."

AOGA has reviewed the Consistency Analysis prepared by the Department of Natural Resources and agrees with ADNR's determination that the Cook Inlet Areawide Lease Sale is consistent with the ACMP and the enforceable coastal management policies of the Kenai Peninsula Borough Coastal Management Program, the Municipality of Anchorage Coastal Management Program and the Mat-Su Borough Coastal Management Program.

Comment noted.

Further, the mitigation measures identified by the Department provide additional assurance that the policies of these district programs have been considered and addressed. Comment noted.

Expansion of onerous provisions and additional restrictions increases the cost of exploring for and developing oil and gas, which directly reduces the value of the leases.

Comment noted. See Issue 10. Administrative or regulatory rules are necessary to protect the environment and minimize potential impacts of the sale. Mitigation measures, and other administrative and regulatory rules may change over time.

This not only results in discouraging current and new operators from allocating their exploration dollars to Alaska, but also in the state receiving lower bids. We urge ADNR to exercise diligence in ensuring that stipulations and mitigation measures are justified and not simply responding to a perceived environmental or public threat.

Stipulations and mitigation measures are necessary to assure that development is done with minimum impact to the environment. The mitigation measures for this sale were developed after considering terms imposed in other Cook Inlet sales and are based on comments submitted by ADF&G, ADEC, other federal, state, and local agencies, environmental organizations, industry, and the public.

Mitigation measure 3 should not preclude the addition of short feeder roads which tie into existing roads.

Mitigation Measure 3 does not allow for short feeder roads which tie into existing roads. It does allow for temporary roads during exploration. Setbacks from fishbearing streams and lakes are arbitrary, especially given the preventative measures employed during oil and gas operations to ensure protection of the surrounding environment. Comment noted. See response to issue 5 and 6 in Section A "Common Issues."

The term "high recreational use" in measure 3b should be defined.

Recreational use varies among and within seasons. Factors include whether sportfishing is allowed on a particular stream or water body. There may be other factors to consider, such as proximity to visitor attractions or presence of campgrounds. Thus, "high recreational use" is a term of art determined at the project or permit level when site and time-specific conditions can be ascertained.

Measure 8 requires lessees to identify on a map or photograph the largest surface area to be utilized for the facility "...including future expansion areas...". A requirement to predict future needs for a project is unrealistic, since project needs and conditions are continually evolving. We recommend the phrase be reworded as "...reasonably foreseeable future expansion areas..."

Adopted. See Mitigation Measure 8 in Section A "Common Issues."

The requirement in Measure 21 to use best available technology should be applied on a case-by-case basis. At a minimum, this measure should be among those for which an exception may be granted, noting that ADF&G and DO&G will be the reviewing agencies.

The requirement is applied on a case-by-case basis when individual plans of operation are reviewed. Exceptions can be requested when construction activities are approved in writing by ADF&G and DO&G, but will require the concurrence of both agencies.

Change measure 22d: to read: "Surface disposal of drilling muds and cuttings will be prohibited." As worded, annular injection of muds and cuttings would be prohibited, and we do not believe this is the intent. Annular disposal of these fluids is a proven, safe and environmentally-sound practice.

Term 22 as previously written has been deleted, as it was pertinent to the Cook Inlet exploration licensing area but not to the Cook Inlet areawide sale. The final finding for the areawide sale will not include a discussion of the exploration licensing area.

This lease sale has been subjected to an extraordinary amount of public scrutiny. Numerous hearings and comment periods were held since 1992. Also, a Stakeholders Group was appointed to review issues associated with the sale; this group held a series of open meetings throughout September and October, 1997, accompanied by public workshops.

Comment noted.

The detailed maps and atlas developed by the DO&G are extremely beneficial in that the public can readily determine how their property relates to the sale area. The inclusion in these materials of state wildlife refuges, game refuges, critical habitat areas and areas where surface entry restrictions are in place is particularly valuable.

Comment noted.

AOGA commends ADNR for its exhaustive consideration of all relevant factors leading to the conclusion that this sale is in the best interest of the State of Alaska.

Comment noted.

## Alaska Support Industry Alliance, Karen Cowart, 6/29/98

Supports Cook Inlet Areawide lease sale and advocates full leasing opportunities in Cook Inlet, North Slope, and Beaufort Sea leasing programs. Responsible access to lands is the key to continued oil and gas development, and with it, jobs for Alaskans.

Comment noted. See Issue 10 in Section A "Common Issues."

Areawide leasing will help Alaska compete in a global market. It costs four to five times more to drill a well in Alaska than it does in the lower 48. Alaska is in direct competition with international locations that offer tremendous resources under much more attractive business conditions. Areawide leasing offers investors a measure of certainty and security by allowing them to plan ahead through a consistent and predictable schedule of annual lease sales.

Comment noted.

Areawide leasing increases efficiency in state government. A best interest finding may take years to accomplish at a cost of nearly \$200,000. By accomplishing the evaluation of an entire region, the state gains efficiencies that will save millions of public dollars and manhours.

Comment noted.

The oil industry's environmental track record shows that oil & gas development and environmental protection are not mutually exclusive. Increases in technology continue to reduce the environmental footprint of development.

Comment noted.

Current fuel bills are 40 percent below the national average. Development of Cook Inlet reserves will ensure an abundance of clean, low-cost energy for businesses and resident of Southcentral Alaska, where more than 80 percent of the electricity generated in the region is powered by natural gas.

Comment noted.

## Alaska Support Industry Alliance, Bill Stamps, 5/7/98

Supports Cook Inlet Areawide lease sale. The oil and gas industry is critical to the economic strength of the state and provides jobs for thousands of oilfield workers and as a result, additional jobs for every oilfield worker created at various other support businesses throughout the state just as fishing timber and tourism industries create additional jobs in Alaska. Oil and gas revenues provide 80 percent of the state's unrestricted revenues. Also provides revenues to the KPB. Without oil and gas industry, we will either lose borough services or have to pick up the slack out of our own pockets.

Comment noted. See Issue 10 in Section A "Common Issues."

## Alaska's People, Kris N. Anderson, 6/11/98

Supports Cook Inlet Areawide lease sale. At year-end 1997, Alaska's People placed more than 1,490 Alaska Natives in jobs, a significant number of those placements were industry-related jobs. Through its commitment to local hire, the industry also supports training programs to help ensure that the manpower to fill these hobs is available.

Comment noted. See Issue 10 in Section A "Common Issues."

### Anchorage Chamber of Commerce, April Jensen, 6/5/98

Supports Cook Inlet Areawide lease sale. Enclosed is a copy of Resolution 97/98-22 passed by the Anchorage Chamber of Commerce Board of Directors in support of proposed sale. Comment noted. See Issue 10 in Section A "Common Issues."

#### Cook Inlet Keeper, Bob Shavelson, 6/29/98

Submits CD ROM containing Cook Inlet Watershed GIS. Interactive Watershed Contacts Directory, and Annotated Bibliography. The GIS database was developed by ESRI, Inc., and includes more than a hundred layers of digital spatial information. Data sets depicted graphically include, ADEC Contaminated Sites, ADEC Wastewater permits, EPA Hazardous Waste Facilities, EPA ERNS Data (Emergency Response Notification System), EPA NPDES Stormwater Permits, Landfills, Military Sites, NPDES Permits -Point Sources, Vegetation Classes, Anadromous Waters Catalog, Cook Inlet Topography, Cultural Features and Infrastructure, roads and trails, state and other timber sales and harvests. Joint ADNR/USFS Annual Statewide Forest Damage Survey, Kenai Peninsula Borough digital parcel set (property boundaries and ownership), ADF&G Digital Habitat Management Guide, NOAA Environmental Sensitivity Summary Data, EVOS Spill Boundary/Oiled coastline, Geohazards-Earthquakes, Halibut trawl landings, USACE gravel infilling permits, surficial geology, hard rock geology, marine mammal and harbor seal habitat/haul outs, and fish and wildlife species distribution datasets.

ADNR believes the cumulative effects discussions in Chapters Five, Six, and Seven are comprehensive and meet the requirements of AS 38.05. Further, this sale as configured has been found to be consistent with the ACMP and all relevant coastal district plans. This issue has been addressed by ADNR in the Revised Proposed Consistency Determination for Cook Inlet Areawide Oil and Gas Lease Sale, dated October 9, 1998. Trustees for Alaska submitted a petition (ACMP appeal) to ADNR on November 3, 1998. The Coastal Policy Council met on November 18 and dismissed the petition. See response to Issue 8.

ADNR has reviewed the CD-ROM created by Cook Inlet Keeper and contractors Montgomery-Watson and ESRI (Environmental Systems Research Institute) and submitted by Trustees. ADNR reviewed each layer in the GIS program for possible relevance in considering the cumulative effects of development. The software program submitted to the Division was apparently the prototype version and there are problems with it that diminish its usefulness. For example, map legends are incomplete. Most of the information on historic contamination is qualitative, although volume and type of pollutant spilled is available for some databases. While the CD does provide useful information on infrastructure, discharge, and contamination, it does not provide the level of empirical or numerical data necessary to perform a quantitative effects analysis, like the type suggested by Trustees. The Keeper data layers have some numerical information on quantity of pollutants, but most of the information is qualitative.

## Juneau Chamber of Commerce, Bruce Abel, 6/26/98

Supports Cook Inlet Areawide lease sale. Continued leasing is vital to the state's economy. Areawide leasing allows investors to plan ahead through a consistent and predictable schedule of sales. Comment noted. See Issue 10 in Section A "Common Issues."

Areawide leasing will increase efficiency in government.	Comment noted.
Oil and gas development and environmental protection are not mutually exclusive.	Comment noted.
Southcentral Alaskans rely on local supplies of natural gas to heat homes and generate electricity. Areawide leasing will hopefully lead to discovery of new reserves and keep energy costs down.	Comment noted.
Kachemak Bay Conservation Society, La	urie Daniel, 4/28/98
Opposed to Cook Inlet Areawide lease sale proposal. Delete environmentally sensitive areas and areas of no industry interest.	Comment noted. See response to Issue 3.
Safeguard private property and neighborhoods by prohibiting onsite drilling in these areas. Private property owners deserve peace of mind that their life's property investment will not be destroyed by unwanted oil and gas development in their neighborhood.	See response to Issue 4 in Section A "Common Issues."
Phasing has created an artificial prohibition against common sense consideration of reasonably foreseeable future effects of oil and gas development on specific parcels.	Phased review is based in part on the fact that some multiphased projects are subject to continued review throughout the succeeding stages. Phased review is intended to allow for consideration of subsequent issues when sufficient data are available upon which to make reasonable decisions. Future phases cannot be reviewed with any accuracy beforehand when information regarding future activities is unknown, nonspecific, undefined, unavailable, or unreliable.
Phasing has created a nightmare of continuous public hearings throughout the permitting process, complicating people's lives by having to track all phases of a project to protect their health, safety, drinking water, tranquility, and private property.	Phasing allows the public to remain involved in the permitting process as the project proceeds and specific environmental concerns are identified.

If a tract is too sensitive for development, why even sell it in the first place if the later permits for exploration and production could be denied? Purchasing tracts on which permits would later be denied makes no economic sense to a company; so the State's refusal to remove tracts indicates that subsequent permits on any parcel offered are a foregone conclusion.

If tracts are too sensitive for exploration or development there may be alternate ways of accessing oil and gas reserves such as directional drilling. Surface entry prohibitions already exist in some portions of the sale area and additional restrictions may be imposed in the future. Industry takes a risk whenever it bids on tracts. They may not be able to develop them for a variety of reasons. There may be so many restrictions imposed on a tract that it is uneconomical to explore or develop it, or the state may not have clear title to a particular tract. Industry understands these risks and bids accordingly. Regardless of whether any exploration occurs the state general fund realizes an economic gain from bonus bids and rentals.

Prohibit oil and gas development within ½-mile of floodplains of major rivers. A ½-to 1-mile corridor exclusion zone should be established depending on the river and the nature of the floodplain, especially considering the increase in unusual and violent weather events worldwide.

Comment noted. See response to Issue 5.

Preclude surface entry on all game refuges, state recreation areas, and critical habitats. Since directional drilling from adjacent areas would have impacts in sensitive buffer areas, these must also be carefully analyzed.

Surface entry is prohibited in Critical Habitat Areas, and State Parks and Recreation Areas. Oil and gas development is permitted in some State Game Refuges and Critical Habitat Areas with surface entry restrictions. In other SGR's and CHA's oil and gas development is prohibited. The Division of Oil and Gas has an agreement with the Division of Parks that there will be no leasing within state parks. There are no federal parks within the sale area.

Delete all acreage offshore south of Kalgin Island. With state opposition to OCS Sale 149, the state should not be offering any leases in these waters, particularly in Tuxedni Bay and Tuxedni National Wildlife Refuge.

None of the acreage included in OCS Sale 149 or the Tuxedni National Wildlife Refuge is part of this areawide sale. It is not necessary to delete all acreage offshore south of Kalgin Island. Offerings in the vicinity of Kalgin Island and Tuxedni Bay can be protected through mitigation measures, both at the lease sale and at the plan of operations phase.

We do not support additional offshore drilling anywhere in the Inlet. Require zero discharge. We were appalled to read on page 5-32 of Volume I that onshore production waters could be discharged into Cook Inlet under the NPDES permit.

Remove all tracts within the Kachemak Bay watershed.

Regarding notification of private property owners who will be affected by leasing, all property owners within ½ mile should be notified. Selecting the nearest 25 owners does not guarantee that all affected parties will be informed. The State has an obligation to protect its citizens by informing them of development activities resulting from the State's actions that may have an effect on the residents' health, safety or quality of life.

Regarding the ACMP Consistency Analysis, KPB Policy 2.4, Proposed Measure 7: (p. 43) The only way to truly avoid significant impact to wetlands is to avoid these areas altogether. Mitigation is usually less than adequate compensation for wetland damage.

All lease activities must comply with applicable statutes and regulations, including the NPDES general permit for Cook Inlet when it is reissued. Most platforms were installed in the Inlet before EPA began pursuing zero effluent discharge. Future facilities could be designed with close-loop fluid systems. The cost to meet a zero discharge requirement for older facilities may force the premature shut-in of offshore wells.

As specific projects are proposed, habitat use evaluations will be completed as part of the plan of operations review and additional mitigation measures imposed if necessary. Therefore it is not necessary to delete tracts within the Kachemak Bay Watershed.

Adopted. All multi-agency permits are coordinated through the Office of the Governor, Division of Governmental Coordination. DGC is required to give public notice when a permit or plan of operations has been proposed in the coastal zone. DGC will forward relevant plans of operation to either the Kenai or Mat-Su Boroughs, or the Municipality of Anchorage. They will generate a list of the owners within one-half mile who will then be contacted by DGC.

This would place unreasonable restrictions on the design, siting, and construction of structures within wetlands. ADNR believes that Mitigation Measure 7, as currently written, provides adequate protection of key wetlands since the measure works to site facilities where the impact on key wetlands would be minimized. Additionally, current law protects wetland habitat-dependent resources. If fill is to be placed in a wetland, a Corps permit is required which includes an evaluation of hydrologic changes, such as impacts to drainage patterns, water quality parameters and current velocities.

Surface entry is prohibited on state lands within the Kenai National Wildlife Refuge. The same should be true for private in-holdings within the Refuge. Most landowners do not own the subsurface mineral estate beneath their property, however measures exist to protect private property rights (See Issue 4). Legally, the state can only lease lands in which the state owns the mineral estate. Theoretically, if the state owned the mineral estate of a private in-holding within the Kenai National Wildlife Refuge, the state could lease it. This is highly unlikely. Practically, there would be problems developing such a lease due to access issues. Also, the issue of ownership of oil and gas between the federal and state government would arise.

Every effort must be made to minimize disturbance and fragmentation in important brown bear habitat. In fact, without the necessary studies to determine the cumulative effects of escalating logging activities on the locally stressed brown bear population, the State is remiss in going ahead with Areawide leasing. Areawide leasing could result in additional development activities occurring within this already dwindling sensitive brown bear habitat. The cumulative effects studies do not adequately address this matter.

ADNR has developed mitigation measures and lessee advisories to minimize impacts on brown bear. Mitigation Measure 26 encourages lessees to prepare and implement bear interaction plans. Mitigation Measure 30 requires lessees to confirm the location of den sites and prohibits exploration and development activities within ½-mile of occupied dens between November 15 and March 15. Mitigation Measure 31 restricts exploration activities in brown bear movement corridors. Under Lessee Advisory 7 and 8, lessees may be required to locate development and production facilities beyond the 500-foot buffer along fish bearing streams and outside brown bear movement corridors.

#### Kenai Peninsula Fishermen's Association, Brent Johnson, 4/30/98

Supports Cook Inlet Areawide lease sale. This support stems in part from the mitigation measures worked out in the stakeholders process that are contained in the preliminary best interest finding. These mitigation measures are satisfactory ground rules under which to conduct the lease sale.

Comment noted.

KPFA has the opportunity to review and comment on post lease sale activities through the permitting process.

Mitigation Measure 28 requires lessees to describe their efforts to communicate with local communities, and interested local community groups, if any, in the development of plans of operation. The intent of this term is to encourage the lessee to engage local residents before the Plan of Operations application is to be submitted, and to make a fair effort to hear and consult with property

KPFA looks forward to working with the oil and gas industry to ensure adequate mitigation measures are in place for future activities. With

owners about local resource values before they finalize site selections. The intent of this term is also to emphasize to the lessee the importance of community involvement, advice, and support in planning operations, especially in high use or highly populated residential areas.

ADNR welcomes input from various user groups affected by the sale to craft mitigation measures that protect the environment and it's resources, while promoting the principle of multiple concurrent use.

#### National Audubon Society-Alaska State Office, John W. Schoen, 6/26/98

The preliminary finding does not adequately evaluate reasonably foreseeable effects; particularly the analysis of brown bear, beluga whales, and rock sandpipers is totally inadequate.

the appropriate levels of communication and

families we represent and those of the oil and

gas industry are certainly compatible.

cooperation on both sides, the goals of the local

Cumulative effects of post-sale activities on fish and wildlife of the sale area is discussed in Chapter Six. ADNR believes this analysis is comprehensive enough for the Director to determine whether this sale, as configured with mitigation measures and lessee advisories, is in the best interests of the state of Alaska.

The finding inadequately assesses the cumulative effects of leasing on state game refuges, critical habitat areas, and Kalgin Island, Clam Gulch, and the Anchor River.

Cumulative effects on designated habitat areas are expected to be insignificant. Reasonably foreseeable cumulative effects on fish and wildlife habitat and populations are discussed in Chapters Five, Six, and Seven. See also response to Issue 3.

Submits information on brown bears regarding population viability, conflicts with humans, and effects of new roads.

Additional information has been incorporated into the finding. See Chapters Three and Six.

If the lease sale results in new infrastructure including new roads and increased human activity in important brown bear habitat, it is likely to have long-term negative impacts on Kenai Peninsula brown bears unless adequate conservation planning and mitigation occurs. The Preliminary finding provides no evidence that this planning and mitigation has taken place.

Deferring to ADF&G, bear interaction plans are an initial step appropriate at the pre-lease phase to prevent unwanted bear mortality. ADNR does not believe holding this sale as scheduled will harm the Kenai brown bear population. This finding may be amended to incorporate any new significant information about the status of Kenai brown bears. If warranted, new measures may be added to protect Kenai brown bears. See response to Issue 6 in Section A "Common Issues."

Recommends that DO&G work closely with the Kenai Interagency Brown Bear Study Team prior to issuance of the Final best interest finding. Additionally, the division should be prepared to wait for development of a brown bear conservation plan for the Kenai Peninsula prior to a lease sale decision. See response to Issue 6. As stated in Chapter Nine, lessees must comply with all current or future ADNR area plans and recreation rivers plans; and ADF&G game refuge plans, critical habitat area plans, and sanctuary area plans within which a leased area is located.

Beluga whales are a species of concern to ADF&G and the Cook Inlet population appears to be an isolated stock. This species is particularly sensitive to disturbances by humans. Exploration and development activities should be prohibited around outlets of major rivers draining into Cook Inlet.

See response to Issue 7 in Section A "Common Issues."

The preliminary best interest finding does not adequately address the cumulative impacts of leasing and subsequent development on the Cook Inlet beluga stock, nor did it address substantive mitigation measures for this population. Recommends the DO&G consult with NMFS to develop beluga whale mitigation.

See response to Issue 7 in Section A "Common Issues."

Submits information on distribution and presence of the Pribilof Island subspecies of rock sandpiper in the proposed sale area. An oil spill in the Susitna flats to Trading Bay area could completely eliminate this subspecies.

Comment noted. Wildlife of the sale area is described in Chapter Three. Oil spill prevention and response is discussed in Chapter Five.

Cumulative effects of a Cook Inlet Lease Sale were not adequately addressed in the Preliminary best interest finding, nor were mitigation measures clearly defined. Recommends that DO&G conduct an adequate cumulative effects analysis for rock sandpipers in cooperation with USGS Biological Resources Division scientists.

As noted above, ADNR believes the analysis of effects presented in this document is comprehensive enough for the Director to determine whether this sale, as configured with mitigation measures and lessee advisories, is in the best interests of the state of Alaska.

Audubon is concerned that this Finding could stand for 10 years without additional environmental review.

Under the DO&G Areawide leasing program, comments and significant new information are solicited annually in a two-month comment period. Modifications to this finding, or to mitigation measures or lease advisories may be made on the basis of new significant information.

#### Ninilchik Native Association Inc., William C. Prosser, 6/17/98

Supports Cook Inlet Areawide lease sale. NNAI represents some 290 shareholders and has rights to over 168,000 acres of land on the lower Kenai Peninsula and west side of Cook Inlet. Comment noted. See Chapter Seven, "Fiscal Effects" and Issue 10 in Section A "Common Issues."

We are actively developing our timber and oil and gas resources. Oil and gas development is essential to the state's economy and the industry provides, directly or indirectly, high paying jobs for over 1,600 people in Southcentral Alaska alone.

Comment noted. See Chapter Seven, "Fiscal Effects."

The environmental record is sound with no documented evidence of any long-term degradation to the environment from more than 40 years of activity in Cook Inlet.

Comment noted. See Chapter Six, "Cumulative Effects."

### North Peninsula Chamber of Commerce, Harry Eaton, 5/11/98

Supports Areawide leasing. At a time of decreasing oil revenues, this is a must do for our state.

Comment noted. See Chapter Seven, "Fiscal Effects."

Innovation and change has made this state a leader in this industry.

Comment noted.

Impacts of the sale will benefit local residents and business communities who support the economy and people of this region. Comment noted. See Chapter Seven, "Fiscal Effects." See also Responses to Issues 1 and 10 in Section A "Common Issues."

#### Oilwatch Alaska, Jim Sykes, 6/29/98

Opposed to Cook Inlet Areawide sale. The State of Alaska has failed to establish need for the sale. It is questionable if it is to benefit Alaskans. Right now, multinational oil companies and Japanese citizens benefit the most because almost 70% is used by the oil and gas industry for operations and export.

There is a significant public need for the sale. Oil and gas development provides revenue to the state as well as local governments. Natural gas is used to generate electricity and heat homes throughout Southcentral Alaska. See response to Issue 1.

The best interests of Alaskans cannot\_be met so long as the current gas extraction use pattern continues.

ADNR finds the Cook Inlet Areawide Sale is in the state's best interest. This decision was reached after thorough analysis of the issues and concerns raised using available information. The first sentence under the major heading at the top of page 4-21 (vol. 1, PBIF) says that, "most residents of the proposed sale area heat their homes with natural gas or gas generated electricity." This statement, while true, is very misleading because that use only accounts for 30% of Cook Inlet's extracted gas.

When read in it's entirety this section makes clear that of the 225 billion cubic feet of natural gas consumed in Cook Inlet each year, 60 percent is sold to two major industrial users for urea and LNG production.

The State of Alaska must intervene on behalf of Alaska's citizens to conserve our energy resources while replacements and alternative energies are developed. Lessee Advisory 5 encourages lessees to participate in research regarding alternative energy sources. See also response to Issue 2.

Should the Department of Fossil Energy action allow the export of gas that may be needed within the region, there is a possibility that natural gas supplies could be drawn-down low enough to force widespread fuel switching that would almost certainly lead to more use of environmentally harmful fuels such as fuel oil, coal, and wood. Thus, the economic analysis in the PBIF does not take into account the harmful side effects of allowing export to continue.

The Alaska economy is heavily dependent on the export of its resources: coal, timber, fish, or hard rock minerals. Areawide leasing may lead to new discoveries of natural gas for export and local consumption. See response to Issue 1.

Areawide leasing does not address the problem of how the resources are being used. Oilwatch Alaska believes that the energy needs of our region can be met with smaller targeted leases, or else export restrictions need to be placed on the areawide lease.

While energy supplies are one consideration, there is also a need to generate public revenue and economic activity.

There are the associated problems of potential pollution. Unocal is in the process of a massive pollution settlement related to their fertilizer plant operations in California. There is certainly a cost to the corporation, the nearby residents and their environment that is not measured in the so called "economic benefits" of development. All of these kinds of factors need to be worked into the economic equation.

Regarding Areawide leasing strategy, see response to Issue 10.

Areawide Leasing does not provide for adequate public input. The standard of "significant new information" being required for annual public review should be changed to "any additional information" and should be required to be considered by the Division of

The issue of Unocal's fertilizer plant in California, and its associated costs, is beyond the scope of this finding. The finding does discuss reasonably foreseeable effects from the sale.

Public input opportunities are not diminished in the areawide leasing process. In fact, the process becomes more predictable for those wishing to comment on future offerings. Areawide leasing will provide an established time each year that the state will offer for lease Oil and Gas.

process.

Oilwatch Alaska notes that there was a great deal of testimony that appeared to be heavily managed and scripted during the public hearing

The heavy hand of the oil industry appears to have used employees to try and influence public process.

Most affected by areawide leasing have very little understanding of it. Requests more community forums like the one in Wasilla, June 26, 1998 prior to the issuance of a final best interest finding.

Recommends the creation of a Citizen Oversight Board, made up of community representatives that have no industry affiliation. The Board would make recommendations to the ADNR Commissioner and Legislature, and the DO&G would be compelled to answer concerns brought by the board.

The PBIF asserts that local zoning ordinances will be followed, but most areas are not zoned and those that are allow mineral resource extraction with few restrictions.

all available acreage within a geographic region. Prior to each sale, ADNR must solicit significant new information that is available, determine if it necessitates a revision to the finding, and issue either a revised finding or a finding of no new information. "Significant new information" is language developed by the legislature. Changing this to "any additional information" would require legislative action.

Both supporters and opponents of the sale came to the public hearings prepared with thoughtful and well reasoned talking points. It is not surprising that many on both sides of the issue expressed similar ideas and concerns.

Public hearings are open to all. ADNR has no control over who testifies. The public hearings produced a wide rang of opinions on the areawide lease sale.

This areawide sale has included many community forums. In October of 1997, the Commissioner convened a stakeholder group of 11 Alaskans representing private landowners, environmental groups, tourism, oil and gas and support industry, Native corporations, tribal councils, commercial fishing, and sport fishing. The stakeholder process included public meetings in Wasilla, Anchorage, Soldotna, and Homer. Following the release of the preliminary finding there were four public meetings, in Soldotna, Homer, Palmer and Anchorage in April and May of 1998.

ADNR does not support creation of such a board. CIRCAC already provides oversight for oil and gas transportation and spill prevention response. The Cook Inlet Keeper is another source of oversight. Further, the ACMP and ADNR review processes provide numerous opportunities for citizen participation.

ADNR has included Lessee Advisory 6 which reads: "In populated areas where there is no local planning and zoning, ADNR may require for approval of plans of operation that permanent structures be designed to be compatible with the aesthetics of the

surrounding area."

Anchorage zoning regulations offer no significant protection to citizens who may face the prospect of development in their back yards.

The adequacy of local government zoning

regulations or absence thereof is beyond the scope of this finding.

Oilwatch Alaska requests that surface occupancy be prohibited within all urban areas.

Such a restriction is too broad. Surface restrictions are best left to the permitting stage when specific exploration or development proposals are presented.

Requests half-mile setbacks from flood plains, rivers, and streams.

See response to Issue 5 in Section A "Common Issues."

## Trustees for Alaska, Stacy Marz, 6/29/98

**I.** ADNR should remove the exploration licensing area from any consideration in the "best interest finding.

The discussion of the exploration licensing area has been removed from the final finding.

II.A. State law requires that ADNR consider and discuss "property descriptions and locations" in the PBIF. This discussion is inadequate because it fails to specify the amount and location of state-owned subsurface acreage available for leasing. ADNR has this information and must include it in the BIF.

Alaska Statute 35.05.035(g)(1)(B)(i) states that ADNR shall consider and discuss "property descriptions and locations" in the PBIF. It does not require ADNR to approximate how much acreage various named entities own of the subsurface or surface estate.

How many of the 4.2 million acres is available for leasing?

Under areawide leasing ADNR writes a Best Interest Finding for an area and then offers for lease all state-owned lands within that area. The boundary for this sale encompasses 4.2 million acres, however the state may only lease lands in which it owns the subsurface estate and that are not subject to an oil and gas lease. Consequently, the area available for leasing is approximately 2.8 million acres.

The PBIF must include the amounts of surface and subsurface area owned by the federal and state governments, the Matanuska-Susitna Borough, the Municipality of Anchorage, the Kenai Peninsula Borough, Cook Inlet Region Inc., the different village corporations, the Mental Health Trust, the University of Alaska, and private individuals and entities. If ADNR is unable to provide exact amount of surface

For this areawide sale the department has produced a detailed tract map showing subsurface ownership, areas with no-surface-entry provisions, major roads, and important recreational areas, like critical habitats and state and national parks. In addition to the tract map, the department has created a 281-page atlas of every township within and immediately adjacent to the area discussed in this finding. These

ownership for each of the various owners, it must provide an approximation of the surface ownership on the owners for which it does not have exact numbers.

It is astonishing that ADNR does not verify its title to the tracts it offers for lease until after the leases are sold. This places an enormous burden on commenting citizens to investigate whether areas of concern are legally leasable.

**II.B.** The discussion of petroleum potential is inadequate. The characterization "low to moderate" is so vague that it is devoid of meaning. ADNR must provide some numerical estimate of oil and gas reserves in the sale area in order to justify even the social impacts of proposing a sale, let alone the social and environmental impacts of actual exploration, development and production.

It must also provide this estimate to comply with the ACMP, which requires a "significant public need" for the activity and requires that there be no practicable alternative to the proposal.

ADNR can provide numerical estimates of petroleum potential, like the MMS does, without compromising the confidentiality of the data upon which the estimates are based.

maps, at a scale of 1:63,360 (1" =1 mi.), consist of merged databases from various sources, and show a greater detail of information, including individual parcels (i.e. lots).

Due to the large numbers of tracts in this areawide sale, it would be an inefficient use of ADNR staff to conduct a title search on each tract prior to the sale. Determining the legal description of a tract once it has been bid on is a much more efficient procedure. The Cook Inlet atlas that the division has developed gives the public a fairly accurate picture of which lands are included in the sale.

AS 38.05.035(g)(1)(B)(ii) requires ADNR to consider the "petroleum potential of the sale area, in general terms." DO&G is not required at the leasing stage to provide a numeric estimate of oil and gas reserves. Under AS 38.05.035(h), DO&G is not required at the leasing stage to speculate on where petroleum reserves are located or if they are present in economically viable amounts. While much is known about the resource potential of this area, reserve estimates cannot be divulged. Reserve estimates are based, in part, on data that DO&G must hold as confidential in accordance with AS 38.05.035(a)(9)(c).

See response to Issues 1 and 2 in Section A "Common Issues."

ADNR considered and rejected for its purposes, the MMS method of estimating petroleum resources because it is highly speculative. MMS uses a complicated computer technique called "Monte Carlo" to estimate undiscovered resources. This program assesses resources for geologic plays, without economic constraints being applied (without considering whether or not any of the resources present in the geologic plays can be economically produced). This type of assessment is an attempt by a team of geologists, geophysicists, engineers, computer modeling specialists, and others to develop sets of scientifically based hypotheses concerning

the quantities of undiscovered oil and gas that could exist, in addition to the known or proved reserves. The methodology generally relies on computer probabilistic modeling of geologic plays. Once this estimate has been done, MMS then utilizes an economic program to estimate the portion of the resources within the plays that would be economically recoverable at various prices. These types of assessments are quite speculative and result in ranges of estimates of the quantities of oil and gas at various probability levels. Time has shown that these estimates are rarely on target and are more useful as a management decision tool to rank the different areas for planning purposes.

Instead of relying on a computer model, DO&G petroleum geologists map potentially prospective subsurface rock units by using confidential seismic and well data, public well data, production and historical performance information from existing fields, and other published reports. However, the only way to verify the presence of oil and gas is to drill, and even after a discovery is made the estimate of the reserves is speculative. Still, each company's assessments may be quite different from each other's and the division's because of the complicated nature of petroleum generation, migration, and trapping. The Sunfish discovery in Cook Inlet is an example of how estimates are not dependable numbers, and can drastically change following additional exploration. According to initial estimates by the lessee. Sunfish contained 750 million barrels of reserves (it should be noted that almost \$64 million were paid to the state for these tracts in a 1992 lease sale). Following additional drilling to delineate the extent of the field the lessee declared the field to be uneconomic and transferred their leases to another company. Therefore, DO&G geologists and economists believe that the best approach is to provide a relative ranking in general terms. It makes little sense for DO&G to recreate probabilistic estimates of undiscovered oil and gas when one group's "assessment" or "estimates" are not necessarily better than another's. This case in point is evidenced by the fact that different companies with similar data often bid widely

ADNR contends that the primary "need" for Cook Inlet Areawide Oil and Gas Lease Sale is the "public need for continuing economic stability." (CA at 27). Because ADNR fails to estimate the oil and gas reserves involved, it also fails to estimate anticipated revenues that would meet the need for economic stability. Such revenues, however, will likely constitute only a very small percentage of existing revenue, presuming commercial quantities of oil and gas are discovered at all given the area's "low to moderate petroleum potential." (PBIF Vol. 1 at 2-17). Because the primary need for the sale is economic stability due to increased state revenue, ADNR must estimate the revenue that the sale might create, and explain the impact of that revenue on existing revenues. Only in this light can the public understand whether this sale is worth the effort, risks, and community disruption, i.e., is in the state's "best interest."

**II.C.** The PBIF's discussions of the individual species of animals considered in the document is deficient.

The following fish and wildlife information is not in the finding, but is critical to determining whether proceeding with the areawide sale is in the state's best interest, what foreseeable impacts will occur, and what mitigation measures must be required.

**C.1.** The PBIF fails to specifically discuss population trends of the individual species. The PBIF considered only one year's worth of data regarding the number of salmon that returned to Cook Inlet. The final finding should provide a statistically significant range of data and discuss whether the individual species have been increasing, decreasing, or sustaining population numbers.

different amounts in lease sales.

DNR is not required to estimate the revenue the sale might create and explain the impact of the revenue on existing revenue under AS 38.05.035(g). Until exploration takes place it is impossible to estimate oil and gas reserves with a degree of specificity that would lead to a meaningful revenue forecast. This is further complicated by the volatility of oil prices. For example, on the North Slope, where annual production is fairly predictable, estimating revenues from year to year is difficult due to fluctuating oil prices.

Under AS 38.05.035(g), ADNR is not required to estimate the revenue that the sale might create, and explain the impact of that revenue on existing revenues. ADNR is required to consider the reasonably foreseeable fiscal effects of the sale. This is discussed in Chapter Seven.

The finding has been modified to include more information on individual species that may occur in the sale area.

See responses below.

Historically, salmon returns fluctuate dramatically and ADNR finds that salmon population trends are independent of oil and gas activity. Such a level of detail on salmon returns is not relevant to assessing the effects of leasing. ADNR sees no causal link between salmon run size and leasing. The number of returning salmon in a given year is not relevant to the Director's determination that this sale is in the state's best interests because there is no evidence to indicate any causal link. Fish of the sale area are described in Chapter Three. Effects of oil and gas activities on fish are discussed in Chapter Six. Effects of oil and gas activities on

in Chapter Five.

Similarly, it should discuss such population trends for the non-anadromous fish species found in the sale area, specifically regarding herring, smelts, and groundfish. For the same reason stated above, such additional detail is not relevant to this finding.

commercial fishing in Cook Inlet are discussed

The "Important Wildlife Habitat" maps accompanying the discussion fail to include the habitats of many of the species discussed. The final finding should include a map that would demonstrate important areas for different fish species.

Under AS 38.05.035 (g) (iii) ADNR is required to discuss fish and wildlife species and their habitats in the area. This is presented in Chapter Three.

**C.2**. The finding should determine the location of important habitat for the Steller's eiders and include a discussion of specific areas where Steller's eiders are found in relation to the sale area.

ADNR added additional information on Steller's eider's. The USF&WS listed the Steller's eider as threatened on June 11, 1997. ADNR contacted USF&WS concerning the status of Steller's eider in the sale area. The most recent information comes from an aerial survey of marine birds in Lower Cook Inlet during the summer of 1993 and winter of 1994 conducted by USF&WS. It found Steller's eiders present in Kachemak Bay and counted 22 birds from Anchor Point to Homer (MMS, 94-0063:123). Only a few hundred breeding pairs have been found in Alaska, and a few dozen of the birds are seen each year wintering along the marine waters along the Alaska Peninsula and the Aleutian chain. Lessees will be subject to the Endangered Species Act and any activities that may affect Steller's eiders must undergo intensive review (ADN, 1997:D-1). Under AS 38.05.035(g),

ADNR should defer offering tracts for leasing in lower Cook Inlet until studies regarding the Steller's eider winter location is specifically identified.

ADNR is not required to defer leasing until studies regarding Steller's eider winter location is specifically identified. Cumulative effects of the sale on marine and coastal birds are discussed in Chapter Six.

**C.3**. The finding should discuss the population numbers or the status of the different regional moose populations in and near the sale area.

Available information about the sale area moose population is presented in Chapter Three.

**C.4**. The PBIF discussion of brown bears fails to provide information from existing and

The description of brown bears and their habitat has been amended. See Chapter Three. See also

available sources on brown bear populations in any part of the sale area. Simply referencing that ADF&G and USF&WS have information on population trends is not adequate because it puts the burden on the commenting citizen to seek out this important information by contacting other agencies.

response to Issue 6 in Section A "Common Issues."

The finding fails to recognize the seriousness of the brown bear conservation issue. Suring et al., (Analysis of Cumulative Effects on Brown Bears on the Kenai Peninsula, Southcentral Alaska, Int. Conf. Bear Res. and Manage. 10 in press) estimated that habitat effectiveness for brown bears has already been reduced by approximately seventy percent due to current human activities from logging, mineral and energy development, and water impoundments.

The finding has been amended to include more recent information on Kenai Peninsula brown bears, including known migration and denning behavior. Mitigation measures 30 and 31 restrict operations to protect bear denning and migration. Lessee advisory 7 cautions that in bear feeding concentration areas, lessees may be required to locate exploration and development facilities beyond the 500-foot anadromous fish stream buffer.

The PBIF fails to represent any habitat areas for bears.

Bear habitat is described in Chapter Three. See also Figure 3.6, Brown Bear Movement Corridors.

The PBIF fails to acknowledge the work done by the Interagency Brown Bear Study Team. The PBIF should discuss the preliminary findings and anticipated results of the research to date. ADNR should defer offering any tracts for leasing on the western Kenai Peninsula until the results are released.

The Interagency Brown Bear Study Team is in the initial stages of development. Like other agencies, ADNR will participate in the development of a conservation plan. Any new significant information in the plan that may affect lease-related activities will be reviewed and the finding amended as warranted to ensure bears are protected.

**C.5**. The PBIF provides no maps depicting habitat important for Dall sheep and mountain goats.

ADNR consulted with ADF&G on the status of Dall sheep and mountain goats within the sale area. Population figures are discussed in Chapter Three. The discussion of Dall sheep and mountain goats is brief because there is limited information available on these species. ADF&G's Habitat Management Guides show Dall sheep present in a very small portion of the sale area. There is no mapped information for mountain goats.

The PBIF contains no information at all regarding the population and distribution of mountain goats in the sale area. Also, there is no discussion regarding these species' sensitivity to noise disturbance.

Population information Mat-Su has been added. ADF&G has no population estimates for Anchorage, but note that a few wolves are trapped within the Municipality. ADF&G does not have any consolidated maps depicting wolf

**C.6**. The PBIF provides population information regarding the wolves on the Kenai Peninsula, but fails to discuss wolf populations in the remaining parts of the sale, in the Municipality of Anchorage and the

Susitna Valley.

The PBIF does not provide information regarding the health status of wolf packs, which is a concern on the Kenai Peninsula due to a biting louse infestation in most of the packs. (Jozwiak 1998, personal communication).

No map depicts wolf habitat. Wolves, however, are strongly associated with their main prey species, the moose, for much of the year. (Peterson et al. 1984).

C.7. The PBIF discussion of beluga whale habitat is completely devoid of any discussion about the importance of the Susitna River delta as critical habitat for the belugas. NMFS biologists believe that this is the primary calving area for the Cook Inlet population. Additional habitat information should be included in the finding, especially considering that the beluga is a species of special concern by ADFG.

**C.8**. The PBIF's sparse discussion of killer whales is devoid of any information regarding the population or population trends of killer whales that occur in the sale area. There is also no discussion regarding the specific location within the sale area where killer whales concentrate.

C.9. The PBIF notes that sea lions have been extensively declining in Alaska over the past thirty years and that in 1994 there were 242,000 animals in Alaska. The PBIF, however, fails to state how many animals occur in and near the sale area or provide any population trend data. Such information is especially important considering that the Steller sea lions are currently listed as threatened under the Endangered Species Act.

distribution and habitat use of the sale area.

Wolf populations increased during the period from 1991 to 1995 on the Kenai Peninsula and in the Mat-Su Borough. See Chapter Three.

ADF&G has no mapped information on wolf habitat. Figure 3.4 depicts moose distribution.

The finding now includes the most recent data on the Cook Inlet beluga whale, including important habitat (See Chapter Three and Figure 3.5).

The description of killer whale distribution in relation to the sale area is presented in Chapter Three. It is brief because there is limited information available about their use of upper Cook Inlet. Aside from possible seasonal feeding, killer whales are not common in the sale area and none are known to reside in Cook Inlet waters.

Recent information on the population status of the Steller sea lion has been added to the finding. See Chapter Three. **C.10**. The PBIF fails to mention that humpback whales occur in and near the sale area in the summer time to feed on the Inlet's rich food sources. The finding should also provide information on population and trends

According to NMFS, humpback whales rarely, if ever, enter sale area waters. About 60 to 80 humpback whales have been seen near the Barren Islands, but none north of Kachemak Bay. Whales are discussed in Chapters Three and Six.

**II.D.1.** Current and projected uses. The following information is not in the finding, but is important to assess whether proceeding with the sale is in the state's best interest, what mitigation measures must be required and what will be the cumulative impacts of the proposed sale.

The PBIF provides community profiles for the KPB and the MSB, see Tables 4.2 and 4.3 (PBIF Vol. I at 4-8. 4-10), but fails to do the same for the MOA, the sale area's most populated borough.

Communities of the MOA are described in Chapter Four. All communities within the borough are located in the Anchorage Census Area. Population estimates for the Anchorage Borough include the communities of Girdwood, Bird, Indian, Eagle River, Birchwood, and Chugiak. Eklutna was counted separately from Anchorage by U.S. census takers.

Information for each community within the MOA, similar to that provided for the other two boroughs, such as 1990 population, 1997 population, incorporation type and land area must be provided.

Anchorage is the only incorporated community within the MOA. Population information is presented to supplement the description of municipalities and communities that may be affected by post-sale activities. Such effects are discussed in Chapter Seven.

The PBIF contains no discussion of whether any local zoning ordinances apply throughout the sale area. Specifically the finding must discuss any local zoning ordinances in the three affected boroughs and all communities within the sale area. The discussion should identify the ordinances relevant to oil and gas activities and the public processes related to such ordinances.

ADNR will not repeat every existing local ordinance that may apply to post-sale activities in this document. The finding does advise lessees in Chapter Nine and in mitigation measures attached to the lease that in addition to compliance with mitigation measures, lessees must comply with all applicable local, state and federal codes, statutes and regulations, and any subsequent amendments.

**D.2**. The finding must discuss the status of state timber sales listed in Table 4.9, list whether they have occurred and the amount of board feet cut on how many acres.

The finding includes the status of timber sales. The amount of board feet cut in timber sales is beyond the scope of an oil and gas lease sale best interest finding.

**D.3**. The presence of industry infrastructure offshore in the fishing corridor or where set net sites are located inevitably impacts where commercial fishers can fish because they must avoid entangling their gear. Thus, a prohibition against siting facilities in the fishing corridor and in set net site locations should be included as a mitigation measure.

ADNR does not believe facility siting prohibitions are necessary to protect commercial fishing. Mitigation measure 15 ensures that commercial fishing will not be impeded by oil and gas activities (See Chapter Nine). Potential effects on commercial fishing and the fishing corridor are discussed in Chapter Five.

The PBIF also states that "[f]ishing vessels may come within close proximity to semi-submersible drill rigs, platforms or anchored construction barges associated with lease activities, especially in the vicinity of tide rips." The mitigation measures provide that lessees can limit access for 1,500 feet around facilities. Does this mean that fishing vessels cannot travel and fish within a circular area that has a 3,000 foot diameter with the facility in the middle? For all these reasons, it is prudent to delete from the sale or place no surface entry restrictions on, all areas important to commercial fishing.

Mitigation measures are written with some flexibility so that they are implemented at the project-phase as they were intended. The intent of the 1,500-foot maximum buffer is to protect facilities from gun fire and this has historically only been applied onshore. Areas of restricted access must be identified in the plan of operations. No lease facilities or operations may be located so as to block access to or along navigable and public waters as defined at AS 38.05.965(13) and (17). If a project were proposed in the fishing corridor, ADF&G. federal agencies, and fishing groups would be invited to participate in the project review process and discuss facility siting alternatives and any site-specific restrictions to vessels operating in Cook Inlet.

It is ironic that the oil industry is allowed to restrict access within 1,500 feet of a facility, but is only restricted to 500 feet where it cannot site a facility near a fishbearing stream or lake. (PBIF Vol. I at 5-41). Clearly, this seems to support the perception that the industry has access priority over recreation in the sale area.

It is not the intent of these mitigation measures to give oil and gas activity priority over recreation or any other use of the sale area. As stated above, the 1,500-foot buffer is to protect onshore facilities from gunfire.

**D.4.** The PBIF discusses the growing tourism industry of the Kenai Peninsula, but fails to discuss the growth rates for other parts of the sale area, such as the Municipality of Anchorage and the Mat-Su Valley, nor are there dollar values placed on tourism in areas other than the Kenai Peninsula.

Comment noted. The finding has been amended to include the most recent information available on tourism in the sale area.

Most of the numerical information provided is based on information collected in 1993. More recent information regarding growth, visitorship, and dollar value of tourism throughout the sale area should be included in The most recent information has been added to the finding.

the finding.

The PBIF lists some tourist destinations and the number of people who visited them in 1993. (PBIF Vol. I at 4-19). For example, 119,200 visited the Kenai River, many to fish for world renowned salmon and raft the river. Such an attraction is not an appropriate place for industrial infrastructure or associated industrial noise. All such tourism-dependent areas should be excluded from the sale area.

within ½-mile of the Kenai River and other rivers to preserve recreation, tourism, and habitat values. This measure also requires lessees minimize sight and sound impacts for new facilities sited less than ½-mile from river banks and in areas of high recreational use. ADNR believes that oil and gas activity and tourism are compatible and mutually supportive. See discussion of the effects of post-sale activities on recreation and tourism, Chapter Five.

Mitigation measure 6 prohibits facility siting

The statement in the PBIF (5-43) that the cumulative effect of oil and gas activities is more revenues to support tourism needs, such as maintaining parks, recreation sites, sanitary facilities, and roads is unduly narrow. There is no discussion of the adverse impact of oil and gas on tourism, such as a decrease in tourism to a specific area because oil and gas industrialization may destroy the wilderness values of an area. For example, tourists may choose to visit another place outside the sale area to kayak if there is a platform placed in a bay that previously was not industrialized. This may mean that supporting businesses would lose income so there may be a decrease in revenues in certain areas. The discussion on tourism and impacts from oil and gas activities must discuss the negative costs as well as benefits to present an accurate picture.

Chapter Five of the finding recognizes that oil and gas development could conflict with tourism in the sale area if lease activities were to restrict access or degrade viewsheds. ADNR is not required to speculate on the amount of money a business may loose because tourists choose to visit an area outside the sale area.

**D.5**. The PBIF discusses the petroleum and support industries and the oil and gas energy supply and demand. Wind, tides, and the sun are possible energy sources in the sale area that should be discussed.

See response to Issue 2 in Section A "Common Issues."

**D.6**. The list of recreational activities of the Cook Inlet/Susitna region (4-23) should also include wildlife viewing, photography, mountain biking, tide pooling, wind surfing, and back country skiing.

The Finding has been expanded to include these activities.

The statement on 5-41 that most recreational activities would not be affected by cumulative

The Director had determined that this oil and gas lease sale, as configured with mitigation

effects because environmental laws and mitigation measures protect most areas used for recreation is conclusory and incorrectly assumes that the mitigation measures provide adequate protection of the area's values and uses as possible.

Additionally, the PBIF incorrectly assumes that most people recreate in the special areas where there are more mitigation measures required. While many people recreate in such places, the entire area is used for recreation of some sort.

ADNR should prohibit surface entry in all areas of high recreational importance, and at a minimum, require a 1,500 foot setback for oil and gas activities from the areas of recreational importance such as special areas, parks, trails, and locations where skiing, hiking, biking, kayaking, windsurfing, etc. occur.

**D.7**. We urge ADNR to prohibit surface entry on all parts of all special legislatively designated areas to protect the species, habitats, and values for which the areas were specially designated.

measures and lessee advisories, is in the best interests of the state. Mitigation measures and lessee advisories, coupled with existing powers to regulate oil and gas activities provide adequate protection of the area's values and uses. See Chapter Eleven.

No such assumption (that most people recreate in the special areas where additional mitigation measures are required) has been made. Additional restrictions for special areas have been imposed in previous lease sales at the request of ADF&G.

Surface entry is restricted in many areas. See Issue 3 in Section A "Common Issues." Numerous mitigation measures (Chapter Nine) restrict surface entry and facility siting in areas of high importance like rivers, fish streams, lakes, and designated habitat. In addition to compliance with mitigation measures, lessees must comply with all applicable local, state and federal codes, statutes and regulations, and any subsequent amendments. Lessees must also comply with all current or future ADNR area plans and recreation rivers plans; and ADF&G game refuge plans, critical habitat area plans, and sanctuary area plans within which a leased area is located. Prohibiting surface entry where skiing, hiking, biking, kayaking, windsurfing, etc. occur at the leasing phase would not be prudent or consistent with the principle of multiple concurrent use for management of state lands under Article VIII, Sections 2, 3, and 8 of the Alaska Constitution.

Oil and gas leasing has taken place in Cook Inlet for the last 40 years and during that time has included many of the areas which are now state game refuges and critical habitat areas. In some cases, there were active oil and gas leases when the game refuge or critical habitat was established and the legislature recognized this. For example, in the statutes establishing the Trading Bay State Game Refuge, the legislature recognized that "all existing [oil and gas] leases shall be valid and continue in full force and effect according to their terms." AS 16.20.038(c). The statute also specifically

allows further oil and gas exploration and development as long as it is compatible with the purposes of the statute. Working with ADF&G, DO&G has developed mitigation measures for these special areas which include surface entry restrictions and seasonal operations restrictions. See Chapter Nine and Mitigation Measure 21. Working with ADF&G, DO&G has developed mitigation measures for these special areas which include surface entry restrictions and seasonal operations restrictions. They strike a balance between protection and development. For activities occurring within a refuge or critical habitat area, the lessee will be required to obtain permits from both ADNR and ADF&G. Operations within these refuges must comply with the terms and conditions of the sale, the regulations contained in 5 AAC 95, and the requirements applicable to special area management plans.

**D.8**. The PBIF discusses the Susitna Flats State Game Refuge, but there is no mention of the importance of the area for its subsistence use by Native hunters of beluga whales. As noted above, this area should be withdrawn from the sale.

This information has been included in the Final Finding. See Chapter Four and response above.

**D.9.** The proposed sale area includes Chickaloon Bay and the proposed Chickaloon Flats Critical Habitat Area, which is important habitat for waterfowl and beluga whales. The section discussing special areas within the sale area, however, entirely fails to mention anything about this area, the species present, the habitat, or the proposed designation as critical habitat. ADNR must consider and discuss this area's fish, wildlife, habitat, human uses and the proposed designation as critical habitat. Because of the importance of the area, ADNR should prohibit surface entry into Chickaloon Bay and Chickaloon Flats.

According to ADF&G designating the Chickaloon Flats as a CHA is not currently under consideration by the legislature. Therefore, a discussion of this area, similar to that of designated Critical Habitat Areas, is premature. It is also premature to impose surface entry restrictions into Chickaloon Bay and Chickaloon Flats. Surface entry restrictions may be imposed in the future, based on site-specific exploration or development proposals.

**E.1**. Regarding geophysical hazards, the PBIF states (5-3) that to figure out the ground acceleration for a specific locality you must consider the site response for bedrock conditions. The PBIF, however, contains no discussion of the bedrock conditions for the

This portion of the geophysical hazards section (Chapter Five) has been updated to reflect the availability of the newest USGS information on ground motion. This information is available on the USGS Website at

http://geohazards.cr.usgs.gov.

sale area to determine ground acceleration in the event of a large earthquake. Such information is important to consider, especially considering that the sale area is located in one of the most seismically active areas in the world, when determining whether proceeding with the sale is in the best interests of the state, what cumulative impacts are foreseeable, and what mitigation measures must be required.

The PBIF reveals that during the 1964 earthquake, gravel liquefaction in Portage indicates that gravel may be more susceptible to liquefaction than previously thought. Considering the strong likelihood for earthquakes to occur in the sale area due to faulting and the lack of knowledge regarding the goetechnical properties of Cook Inlet bottom sediments, no tracts should be offered on fault zones.

The PBIF also states that "[a]ll structures must be designed and built to meet or exceed the Uniform Building Code specifications for seismic zone 4 (highest earthquake hazard)." (Id.) Requiring structures to meet such building standards for earthquakes is certainly prudent in such a seismically active environment. The mitigation measures, however, do not expressly require such standards. A specific mitigation measure to implement the above quoted language should be included in the finding.

Because of the high costs involved with offshore drilling (\$35 million for Forcenergy's Osprey platform), it's to the lessee's benefit that shallow subsurface conditions be determined before siting a drilling rig. Side-scan sonar can be used to reveal near-surface conditions, including the presence of fault zones, which can then be avoided. It's standard practice for the insurance company that is underwriting the drilling rig to require the use of side-scan sonar.

It is common practice to incorporate ground motion values when designing structures. It is not necessary to have a mitigation measure requiring standards that are already being met.

Cook Inlet is located in the Pacific earthquake belt and, as evidenced by the widespread damage from the 1964 Good Friday earthquake, structures are indeed subject to potentially large earthquake loadings.

As for platforms located within the inlet, winter sea ice is the principal force imposed on these structures. When compared with ice, the earthquake forces are actually relatively small and, with the exception of a few individual members, do not govern design.

Platforms in the Cook Inlet meet a critical design loading considered to be a combination of the maximum-thickness ice hitting all legs simultaneously at the highest tide elevation and with maximum drilling and operational vertical loads applied. They are designed to withstand loading conditions in excess of a lateral load of 5,000 deadweight tons and a vertical load of 5,250 deadweight tons. For a more complete

**E.2**. In recognition of the potential for severe flooding, ADNR should require no surface entry or siting of facilities or infrastructure in the floodplains of the area's rivers. Requiring setbacks from the edge of floodplains will help ensure that floods, which occur with regularity in the sale area, will not upset facilities located in the floodplain, potentially damaging habitat, fish and wildlife, and the uses of the area.

**E.3**. To avoid instability due to erosion, the PBIF states that structural failure can be avoided by proper facility set-backs from coasts and river banks. While it is important to require setbacks from major rivers, the setbacks should be from the edge of the floodplain instead of the banks. This will help ensure that floods, which occur with regularity in the sale area, will not upset facilities located in the floodplain.

F. The PBIF discussion entitled "Likely Methods of Oil and Gas Transportation" is inadequate because it fails to address methods likely to be used in areas currently far from infrastructure and it fails to discuss the advantages, disadvantages, and relative risks of the various transportation modes. ADNR must discuss the foreseeably necessary transportation infrastructure additions and related industry sprawl associated with the proposed sale, particularly for those tracts not located near existing infrastructure, as well as the advantages, disadvantages, and risks involved. As in Camden Bay I, it is unclear what transportation methods ADNR will employ or authorize if oil is discovered in various places within the Cook Inlet Areawide sale area, and what environmental risks those

overview of platform design, operational requirements, fatigue, corrosion, and maintenance, see: Visser, Robert C. "A Retrospective of Platform Development in Cook Inlet, Alaska" <u>Journal of Petroleum Technology</u>. February, 1992. Pp. 146-202.

Requiring facility setbacks from the edge of floodplains is unnecessary. Adherence to the Uniform Building Code (1994) ensures that all facilities will be designed and built to withstand a 100-year flood. Additionally, all three boroughs have adopted floodplain construction guidelines into local code which require that uses within the 100-year floodplain be provided with flood protection or flood proofing at the time of initial construction.(MSB: 17.29.180; MOA: 21.60; KPB: 21.06). See response to Issue 5 in Section A "Common Issues."

See above response. The Kenai River experienced a 100-year flood event at Soldotna in 1995, however, DO&G is unaware of any damage to oil and gas facilities. Therefore, there is nothing to justify increasing setbacks to include the entire floodplain of a river system.

AS 38.05.035(g)(1)(B)(viii) requires that a best interest finding consider "the method or methods most likely to be used to transport oil or gas from the lease sale area, and the advantages, disadvantages and relative risks of each." In the transportation and oil spill sections, ADNR considered onshore and offshore pipelines, tankers, and marine terminals. Regardless of where the deposit would be located, it would use one or a combination of the methods discussed. Until exploration has been conducted and a commercially exploitable discovery is made, it is impossible to discuss specific sites, designs, construction or transportation routes for an area.

methods will pose. In addition, there is no discussion about the need for tanker tug escorts to minimize navigational problems.

In addition, this general discussion does not specifically describe the location of the existing infrastructure such as oil pipelines, gas pipelines, offshore platforms, oil wells, gas wells, plugged and abandoned wells, oil fields, gas fields, production facilities, and highways. This information could easily be conveyed in a map displaying oil and gas facilities in and near the sale.

**G.1.** The PBIF discusses (p. 5-11 to 5-14) the amount of oil spilled in the past, noting that AOGCC compiled statistics for all types of offshore petroleum spills in the Cook Inlet region for the period 1965 to 1980. This data, however, is now eighteen years old. Updated statistics should be included in the finding.

In addition, while the PBIF states that 219,410 gallons of Cook Inlet crude oil spilled in the Inlet between 1987 and 1997, (Id.), there is no mention of how much oil spilled on land during that time.

Similarly, the PBIF notes that "[p]ipeline failures have occurred on the offshore pipelines," (p. 5-12), but fails to state how much oil spilled as a result. Recent information regarding the amount of oil spilled on land and offshore must be included in the finding.

The PBIF also states that "[a]ny time crude oil or petroleum products are handled, there is a risk that a spill might occur." (p. 5-11). There is no discussion, however, that contains estimates of the risk of such an event occurring.

In OCS Sale 149, MMS estimated the likely trajectory and fate of spilled oil, and the associated resource impacts (FEIS Vol. I,

ADNR has added a reference to Figure 6.5, a map of the Cook Inlet showing existing oil and gas infrastructure, to the transportation infrastructure discussion in Chapter Five. More than 1,000 wells have been drilled in Cook Inlet and presenting location information on a page-size map is not possible. DO&G maintains a listing of active wells (http://www.dnr.state.ak.us/oil). Detailed information on well status and locations can be

Current spill data compiled in the 1997 "Cook Inlet Sub-Area Contingency Plan" and generated from the ADEC spill database is included in the discussion of spills. The

AOGCC data remains in the Finding to provide

obtained by contacting AOGCC.

historical information.

Information on land based spills has been added to the finding. See Chapter Five.

The pipeline failures occurred over 20 years ago when the platforms and pipelines were constructed. There have not been any reported failures since 1976. Records are not available for spills prior to the 1980s.

Chapter Five discusses compiled statistics for all types of offshore oilspills and includes historic spill rates for tankers.

The likely trajectory and fate of spilled oil can only be reasonably estimated when the location, physical characteristics and possible spill rate of IV.A.1-12). ADNR should do the same.

oil is known. These factors can only be known after the reserves are discovered. State and federal laws require that petroleum facility operators prepare oil discharge prevention and contingency plans specific to their facility before that facility may operate. These plans must include a response action plan, a prevention plan, and supplemental information to aid in the response and cleanup of a spill at their facility. Trajectory and fate information is included in these industry c-plans. The plans go through an extensive review process. See Chapter Five "Oil Spill Prevention and Response."

**G.2.** The PBIF discussion on spill response (p. 5-16) fails to discuss what the response would entail, i.e., what possible actions would the ICS and response teams take to contain and clean up an oil spill.

Response actions vary greatly with the nature, location and size of the spill. General response activities may include: 1) locate and stop the spill if possible; 2) estimate the spill amount, determine the substance's chemistry and estimate the trajectory; 3) determine what equipment would most effectively recover spilled oil; 4) mobilize appropriate equipment to confine spilled oil or to protect especially sensitive areas from oiling; and 5) assess the damage to oiled areas, develop a plan for cleanup and implement it. Response equipment might include boats, earth-moving equipment. airplanes, helicopters, boom, skimmers, sorbants, and dispersants application machinery. The responsible party and its contractors usually performs the response activities with assistance and monitoring by federal and state agencies. See Chapter Five "Oil Spill Prevention and Response."

The PBIF states that "[t]he history of crude oil spills in Cook Inlet and the low to moderate potential for discovering new reserves indicates that there is low to moderate probability of a major spill occurring as a result of this proposed areawide sale." (p. 5-17). The assumption that the petroleum potential dictates the likelihood of an oil spill is incorrect. The latter, which depends on a variety of external factors, does not necessarily follow the former. For example, weather, geological hazards, mechanical malfunction, and human error all may cause an oil spill. These causes have nothing to do

ADNR attempted to make a general statement regarding the risk of an oil spill occurring as a result of this lease sale. Trustees' comment is correct; there are too many "external factors," almost all of which are not known at the time of the lease sale, to make an evaluation of oil spill risk, so the Finding includes only a general statement.

with the amount of oil discovered.

**H.1.** Offshore operators discharge produced waters into Cook Inlet. The PBIF describes Cook Inlet as an estuary (p.2-3 and 5-23). Proposed mitigation measure 19 prohibits the discharge of produced waters into estuaries. Therefore discharge of produced waters into Cook Inlet will be prohibited.

**H.2.** The PBIF presents a list of impaired waterbodies (p. 5-27). What constitutes an impaired waterbody? What are the other causes for listing other than urban and storm water runoff? Where are there impaired waterbodies within and near the sale area and what pollution sources contributed to their listing?

During drilling, non-toxic fluids should be required all the time, not only after drinking water aquifers have been passed and the casing is in place. If non-toxic fluids are required prior to the placing of the protective casing to protect against contaminating the drinking water aquifers, they should be required after the protective casing is in place, to protect against accidental discharges to a groundwater aquifer which may result from ruptured or leaking casing. DOG should add a mitigation measure that requires the use of non-toxic fluids during all phases of drilling, including before and after the protective casing is in place.

The finding has been amended to more accurately characterize Cook Inlet's physical properties. All oil and gas discharges into Cook Inlet are subject to the effluent limitations prescribed in the Cook Inlet general NPDES permit, issued by EPA and certified by ADEC. The state of Alaska determined this permit to be consistent with the ACMP and the policies of the Kenai Peninsula, Matanuska-Susitna, and Anchorage coastal district plans. See response to Issue 9 in Section A "Common Issues."

States are required under Section 303(d) of the Clean Water Act to prepare a list every two years of surface waters not expecting to meet state water quality standards. Section 303(d)-listed waters are surface waters with documentation of actual or imminent persistent exceedances of water quality criteria, or adverse impacts to designated uses, as defined in Alaska's water quality standards. For more information, contact ADEC, Air & Water Quality division or visit the following Website: <a href="http://www.state.ak.us/local/akpages/ENV.CONSERV/dawq/wqm/wqp">http://www.state.ak.us/local/akpages/ENV.CONSERV/dawq/wqm/wqp</a>.

The likelihood that a drinking water aquifer will become contaminated from drilling is low. Casing and cementing, and underground aquifer protection regulations are promulgated and enforced by the AOGCC (20 AAC 25). The goal of the Underground Injection Control (UIC) program is to protect underground sources of drinking water from contamination by oil and gas (Class II) injection activities. The UIC program requires AOGCC to verify the mechanical integrity of injection wells, determine if appropriate injection zones and overlying confining strata are present, determine the presence or absence of freshwater aquifers, and ensure their protection, and prepare quarterly reports of both in-house and field monitoring for the U.S. Environmental Protection Agency (EPA). For some detail on EPA's Underground Injection Control program, which is administered by AOGCC, see the section on injection of drilling waste in Chapter

There is no quantification of how many commercial and residential dump pits exist in and near the sale area and how many have recovery plans. In addition, there is no discussion of the current status of the cleanups, i.e., how many sites are closed?

The PBIF states that in 1992, there were approximately 1,300 contaminated sites identified statewide, of which 180 have detected groundwater contamination. The finding should specify how many contaminated sites, with and without groundwater contamination, exist in and near the sale area.

There is no specific discussion of contaminated sites and active reserve pits in and near the sale area.

The PBIF uses the Poppy Lane site as an example of site clean up (p. 5-28), but fails to mention the extent of the contamination, how the site was cleaned up, the impact it had on residents, and the current condition of the site.

Five. For more information on aquifer protection, contact AOGCC or visit the following Website:

 $\underline{\text{http://www.state.ak.us/local/akpages/ADMIN/o}}_{gc/}.$ 

Existing surface and groundwater quality of the sale area is described in Chapter Five. Detailed information about contaminated sites and their clean up can be obtained by contacting ADEC.

ADEC compiled a list of all contaminated sites in its database within the tri-borough area. Most contaminated sites are associated with leaking underground storage tanks from gas stations and leachate from old landfills. Numerous leaking underground storage tanks exist in Alaska. Of the 931 Active UST sites, 442 (46 percent) are in the sale area. Anchorage leads the list with 278, followed by Elmendorf AFB (47). Of the 596 closed USTs statewide, 413 (69 percent) are in the sale area. Anchorage leads the list with 272 closed sites. Detailed information on contaminated sites and groundwater contamination can be obtained by contacting ADEC.

The finding has been amended to include discussion of existing soil and groundwater contamination, including contaminated sites and reserve pits.. See Chapter Five.

Poppy Lane was mentioned in the PBIF and previous sale documents (85A) as an example of a contaminated site. The Poppy Lane gravel pit is still undergoing active cleanup.

Contamination at this site is not limited to oil and gas pollution sources. The known contaminated soil areas have been excavated and remediated based on a risk analysis to less than 1000 ppm of Diesel Range Organics. The remediated soils have been placed back in an upgradient area of the pit. Artificial created wetlands & phytoremediation (similar to bioremediation except that is utilizes plants to clean up water) is being used to address remaining groundwater contamination. Once the

contaminated soil was removed, the groundwater nearly met cleanup standards. Groundwater monitoring is ongoing and will continue for 5 years after construction of the wetlands is completed.

Only one home downgradient from the Poppy Lane site (Hardy House) was shown to be affected by contamination from the pit.

Marathon drilled a new water well and eventually purchased the property. The remaining homes around the facility are on the upgradient side of the site. Testing by ADEC and EPA did not show contamination of the wells on these properties. However, because of property owner concerns Marathon purchased the properties. They then cleared the sites, backfilled foundations, filled or pulled septic systems and abandoned wells on the properties.

The PBIF notes (p. 5-28) that in one past situation on the Kenai Peninsula an operator was required to have a 500-foot setback between explosive charges and wells and building foundations to prevent shallow aquifer damage. There should be a mitigation measure requiring a minimum of 500-foot setbacks from wells and buildings.

DO&G is unaware of any instance of shallow aquifer damage resulting from seismic surveys. The safe distance between explosive charges and structures, like wells and building foundations, is a function of the size of the charge and the characteristics of the receiving soil. Requiring a mandatory setback distance of 500 feet in every instance would not be prudent at the leasing phase because it may unnecessarily preclude seismic data acquisition needed to develop the state's resources.

**I.** The PBIF discussion about scenic resources is inadequate. Mitigation measures should be adopted that require visual management considerations and measures developed by Mann and listed on p. 5-34.

The discussion about scenic resources is intended to supplement the finding and assist the Director in determining whether this sale is in the best interests of the state This discussion is not required under AS 38.05.035(g), which lists the required elements of a best interest finding. The finding does state that mitigation of viewshed impacts is entirely project-specific and cannot be accomplished at the lease sale stage because no specific project has been proposed. As the case studies described in Chapter Five show, when a review of a project's impact on scenic resources is warranted, concerns and input of community members is fundamental to the success of the development project. Only after visual impact concerns have been raised at the permit approval stage can project and siteThe PBIF must acknowledge that all visual impacts cannot be mitigated.

**J.** There is no depiction in Figure 6.1 (Well 'Reach' vs. Time) of the horizontal departure achieved in Cook Inlet. A graphic depicting the proven and reasonably expected horizontal reach in Cook Inlet should be included.

**K.1.** ADNR's treatment of cumulative impacts is insufficient. Impacts to water, air, and land from existing development are quantified and accessible, and impacts from activities associated with the Cook Inlet Areawide sale, including expected oil spills, and discharges to water, air and land are foreseeable and capable of estimation. ADNR should analyze the impacts from existing development. There is considerable existing industry development in portions of the sale area and readily available information to support analyzing the impacts of current activities. We submit the attached Cook Inlet Keeper CD-ROM for consideration of cumulative effects. ADNR should consider the reasonably foreseeable cumulative effects impacts of the Cook Inlet Areawide Lease Sale in light of the pollution, biological and other watershed-based information in the Cook Inlet Keeper CD-ROM. We also submit for consideration a GIS map of the sale area that reflects the location of some of the pollution sources and biological concentrations.

specific measures be applied. Lessees must comply with all applicable local, state and federal codes, statutes and regulations, and any subsequent amendments. Lessee Advisory 6 states that in populated areas where there is no local planning and zoning, ADNR may require in approval of plans of operation that permanent structures be designed to be compatible with the aesthetics of the surrounding area.

Because visual impacts are inherently subjective and can vary from person to person, such a statement lacks meaning. There may be instances where all visual impacts can be lessened or avoided for a particular project in a particular community.

Figure 6.1 is included to demonstrate the continuing evolution of directional drilling technology. Coal seams are a particular detriment to directional drilling in Cook Inlet. As stated in Chapter Six, horizontal displacements of ½-mile to 2 miles are typical for Cook Inlet.

ADNR believes the cumulative effects discussions in Chapters Five, Six, and Seven are comprehensive and meet the requirements of AS 38.05. Further, this sale as configured has been found to be consistent with the ACMP and all relevant coastal district plans. This issue has been addressed by ADNR in the Revised Proposed Consistency Determination for Cook Inlet Areawide Oil and Gas Lease Sale, dated October 9, 1998. Trustees for Alaska submitted a petition (ACMP appeal) to ADNR on November 3, 1998. The Coastal Policy Council met on November 18 and dismissed the petition. See response to Issue 8 in Section A "Common Issues."

ADNR has reviewed the CD-ROM created by Cook Inlet Keeper and contractors
Montgomery-Watson and ESRI (Environmental Systems Research Institute) and submitted by Trustees. The CD contains the Cook Inlet
Watershed GIS, Interactive Watershed Contacts
Director, and an Annotated Bibliography. The
GIS database was developed by ESRI, Inc. and includes more than one hundred layers of digital

spatial information. Data sets depicted graphically include ADEC contaminated sites, ADEC wastewater permits, EPA hazardous waste facilities, EPA ERNS (Emergency Response Notification System) data, EPA NPDES stormwater permits, landfills, military sites, NPDES permits, point sources, vegetation classes, anadromous waters catalog, Cook Inlet topography, cultural features and infrastructure, roads and trails, state and other timber sales and harvests, joint ADNR/USFS annual statewide forest damage survey, Kenai Peninsula Borough digital parcel set (property boundaries and ownership), ADF&G digital habitat management guide, NOAA environmental sensitivity summary data, EVOS spill boundary/oiled coastline, geohazardsearthquakes, halibut trawl landings, USACE gravel infilling permits, surficial geology, hard rock geology, marine mammal and harbor seal habitat/haul outs, and fish and wildlife species distribution datasets.

ADNR reviewed each layer in the GIS program for relevance in considering the cumulative effects of development. The software program the Keeper sent was apparently the prototype version and there are problems with it that diminish its usefulness. Map legends are incomplete. Also, it is not possible to view the timber sales layer and the roads layer at the same time, which would be useful in decision making at the project or permit level.

Most of the information on historic contamination is qualitative, although volume and type of pollutant spilled is available for some databases. While the CD does provide new and useful information on infrastructure (roads, landfills), discharge (EPA and ADEC wastewater permit sites and Toxic Release Inventory facility locations), and contamination (RCRA sites, Superfund sites, solid waste disposal sites), it does not provide the level of empirical or numerical data necessary to perform a quantitative effects analysis, like the type suggested by Trustees. The Keeper data layers have some numerical information on quantity of pollutants, but most of the information is qualitative.

**K.2.** The discussion on effects on water quality on page 6-21 is inadequate. There is no quantification of accidental spills of fuel lubricants or chemicals that have occurred from the existing oil and gas activities in and near the sale area. There is no discussion about the existing conditions of erosion and sedimentation or existing levels of turbidity and suspended solids concentrations. There is no quantification of the amount of oil spilled that existing industry has caused. Merely listing the possible impacts without analyzing how they will affect the water quality does not comport with the statutory requirement of considering and discussing cumulative effects.

As noted in above response, ADNR believes the cumulative effects discussions in Chapters Five, Six, and Seven are comprehensive and meet the requirements of AS 38.05.

There is no discussion of the amount of NPDES discharges that occur, and no analysis of the toxic chemicals contained in these discharges and their impacts on the water, fish and wildlife.

and effects on water quality are discussed in Chapter Five. Cumulative effects on air and land habitat, and on fish, wildlife, and uses of the sale area are discussed in Chapters Six and Seven. ADNR reviewed both referenced data sets. The

NPDES discharge and drilling waste disposal

ADNR should consider the Toxics Release Inventory (TRI), maintained pursuant to the Emergency Planning and Community Right-to-Know Act. In addition, DEC's list of impaired water bodies should be considered in determining the cumulative impacts of existing and expected oil and gas activities.

EPA Toxic Release Inventory (TRI) provides gross tonnage release data for two oil and gas facilities in Alaska (Tesoro refinery and Unocal fertilizer plant) but does not contain information whether these releases exceeded allowable levels or other information sufficient to consider their effects. In addition, under AS 38.05.035(g)(1)(B)(vi), DO&G is only required to consider the reasonably foreseeable cumulative effects of oil and gas exploration, development, production, and transportation on the sale area. A discussion of refineries and fertilizer plants is not required. Moreover, the director has limited the scope of the review to the reasonably foreseeable cumulative effects of exploration, development, production, and transportation. However, these issues were fully discussed in the ACMP analysis issued March 31, 1998. ADEC's list of impaired waterbodies was also reviewed and is presented in Chapter Five.

**K.3.** The PBIF lists the air pollutants associated with oil and gas exploration, development, and production that are likely to affect air quality. There is no quantification of

According to ADEC and EPA, air quality throughout the Cook Inlet area is very good, with concentrations of regulated pollutants well below the maximum allowed under National these pollutants, despite the fact that such information is readily available from DEC. The PBIF should also quantify the air pollutants emitted from Unocal's agricultural products facility at Nikiski.

Ambient Air Quality Standards in Cook Inlet. If leases sold as a result of the Cook Inlet Areawide sale are ever developed, limitations on nitrogen dioxide, sulfur dioxide, and total-suspended-particulate matter will be imposed on industrial sources under the provisions of the Prevention of Significant Deterioration Program, administered by EPA.

DEC's Air Quality Maintenance Program controls significant, stationery sources of air contaminants to protect and enhance air quality and abate impacts on public health and the environment. The 1970 Clean Air Act established air quality programs to regulate air emissions from stationary, mobile and other sources which pose a risk to human health and the environment. ADEC monitors compliance with regulations and air quality standards through annual inspections and uniform enforcement procedures. The agency issues operating permits to existing major facilities incorporating all applicable requirements, and issues construction permits to new large facilities and for expansions of existing facilities.

All industrial emissions must comply with the Clean Air Act (42 U.S.C. §§ 7401-7642) and state air quality standards. 18 AAC 50 provides for air quality control including permit requirements, permit review criteria, and regulation compliance criteria. 18 AAC 50.300 sets up standards for air quality at certain facilities, including oil and gas facilities, at the time of construction, operation or modification.

Except for natural events (e.g., volcano eruptions, wildland and prescribed fires, wind blown dust from glaciers), the only area currently monitored in which air quality standards are exceeded is in the Municipality of Anchorage for carbon monoxide.

The latest available EPA Toxic Release Inventory (TRI) contains data from 1996. It lists the Tesoro Alaska Nikiski oil refinery and the Unocal Agricultural Products plant as first and third in Alaska for releases of pollutants, but ADNR's list of emission sources (p. 6-22 and 6-23) is quite extensive, but is of little use without some measure of the type and the quantity of emissions that occur and are expected to occur from this sale. The PBIF states that "[e]levated levels of airborne emissions would be temporary and would diminish after construction phases are complete." There is no discussion of what airborne emissions would be elevated, at what quantity would these elevated levels occur, or how long a time period "temporary" describes.

There are reasonably foreseeable impacts on air quality that are known at the lease sale stage, against which ADNR can require mitigation measures. For example, once determining existing and reasonably foreseeable air pollution in the Municipality of Anchorage, ADNR could provide that only a specified amount of new air pollution could occur in Anchorage before air quality is jeopardized and limits would have to be instituted. Industry can then take this into account before it bids on tracts within the Municipality of Anchorage.

**K.4.** As of September 1997, DEC's contaminated sites data base showed that the Cook Inlet drainage had 1,265 contaminated sites (Contaminated Sites in Alaska, DEC, January 1997 at 4). ADNR must consider contaminated sites and reserve pits in analyzing the cumulative impacts of past oil and gas activities on land.

ADNR can look at the previous forty-one lease sales that have occurred in the Cook Inlet area over the last forty years and project the number of tracts that will be leased. ADNR can estimate how many leased tracts will be explored, developed and will actually produce marketable quantities of oil and gas. From that information, ADNR can project the

does not contain information whether these releases exceeded allowable levels or other information sufficient to consider their effects.

Typical air pollutants that may be discharged are discussed in Chapter Six. To estimate any quantities that may or may not be discharged at a future data would be speculative. Such project-specific information is not and cannot be known at the lease sale phase. Under AS 38.05.035 (h), DO&G is not required to speculate about possible future effects subject to future permitting that cannot reasonably be determined until the project is more specifically defined.

Reasonably foreseeable effects of this sale are described in Chapters Five, Six, and Seven. Air quality is monitored and protected by ADEC and EPA (See Chapter Eight). New facilities will be subject to Alaska ambient air quality standards. It remains unknown why potential bidders would consider hypothetical facility construction and operation permits when deciding to bid on a particular tract.

See response to comment K.1 above. See also response to Issue 8 in Section A "Common Issues."

Such an exercise would be speculative and is beyond the scope of this finding. See AS 38.05.035(h). There is no discernable trend that would allow one to project the number of tracts that would be leased in a given lease sale much less how many would eventually be developed.

anticipated quantity and type of discharges to water and emissions to air that can be expected.

Should ADNR later determine that the cumulative impacts of new and existing development on the coastal area are problematic, the state will be unable to prohibit the undesired activity without paying compensation to the lessee.

**K.5.a** There is no reference made on page 6-25 as to which type of environment – low or high energy – the different parts of the offshore sale area are which would indicate what impacts on the benthos are expected.

**K.5.b.** The PBIF suggests that impacts to fish from seismic surveys can be mitigated by restricting the use of explosives in open water or in close proximity to fish-bearing lakes and streams, and by requiring that the use of explosives in intertidal areas be limited to low tides when these areas are dewatered. However, ADNR fails to require such mitigation measures. ADNR should prohibit seismic activities offshore and on shore in and near salmon migration and spawning habitat when fish, eggs, or larvae are present.

**K.5.c.** It is misleading to state that it is unlikely that killer whale populations would be affected by a spill (p. 6-25) because if there is a small number of killer whales in Cook Inlet and they become oiled by a spill, the population in Cook Inlet could crash.

Why would the Cook Inlet beluga whale be at risk from a spill event and how severe is the

If significant new information warrants, this finding or its mitigation measures can be modified to ensure resource values are protected. Lessees are advised that in addition to compliance with attached mitigation measures, they must comply with all applicable local, state and federal codes, statutes and regulations, and any subsequent amendments. Federal, state and local government powers to regulate the oil and gas industry are presented in Chapter Eight. Lessees may or may not propose any surface activity or facility construction. By awarding a lease, the state does not authorize any development, nor does it guarantee that the lease is developable.

The high-energy offshore environment occurs where tidal effects and bathymetry produce currents that mix the water column. See figure 2.1 The entire offshore portion of the sale area is a high-energy environment. See "Oceanography of Cook Inlet," Chapter Two.

Such mitigation measures are applied at the permit approval phase, when site-specific seismic survey plans are reviewed during a multi-agency ACMP review process. During such reviews, ADF&G recommends measures tailored to the seismic program to protect larval, juvenile, and adult fish habitat, migration, spawning, and the harvest of fish. Open-water seismic permits typically prohibit operations that may harm fish or obstruct fishing.

According to NMFS, there is no resident Cook Inlet killer whale population. See discussion of whales in Chapter Three.

A large summer spill in the feeding and calving concentration areas of the beluga whale could

risk to their population?

**K.5.d** Information from the interagency brown bear study team must be reviewed to determine the impacts from this and other development projects on bear populations on the Kenai Peninsula. There is no discussion of the impacts to bears from increased industrialization and resource extraction on their habitat and travel corridors. Nor is there a discussion of the increasing pressure on the Kenai Peninsula brown population from defense-of-life-and-property killings by humans because of increasing conflicts due to human encroachment from development projects and their associated road access into bear habitat. Mitigation measures must prohibit the building of roads into and near bear habitat and travel corridors.

result in a mortality level affecting the Cook Inlet beluga whale population. However, the likelihood of such a spill is low and thus the risk to the beluga whale population is low. See Chapter Five for discussion of oil spill prevention and response.

Recent information from this study effort has been incorporated into Chapters Three and Six. See response to Issue 6 in Section A "Common Issues."

The PBIF fails to mention the impacts to denning bears from seismic activities. Mitigation measures must prohibit seismic activities in bear denning habitat. Bear interaction plans must be mandatory.

Effects of oil and gas activities on bears are discussed in Chapter Six.

**K.5.e.** The PBIF fails to discuss the impacts on other species that occur in the sale area such as Dall sheep, mountain goats, and wolves.

As noted in Chapter Three, Dall sheep and mountain goats are generally not found in the sale area, and thus would not be affected. Additional information on effects of oil and gas activities on wolves has been added to the finding.

**K.6.** The PBIF discusses the noise and disturbance impacts on beluga whales, stating that studies where captive belugas were exposed to drilling sounds did not result in behavioral changes or increases in stress-related hormones (p. 6-35). It is not discussed, however, whether the study results are expected to be the same with wild belugas.

It is not possible to know what the behavioral changes will be for captive whales, verses wild ones. However, the observation that results may differ between captive and wild whales is valid and has been incorporated into the final finding. See Chapter Six, "Effects on Subsistence Uses."

The PBIF includes no mitigation measures to protect belugas from offshore drilling. NMFS

Mitigation measures designed to protect subsistence hunting also protect beluga whales recommended deleting tracts within 5-miles of the mouths of several creeks and rivers, and portions of Knik Arm. ADNR did not incorporate any of NMFS's suggested tract deletions in the PBIF. Given NMFS's expertise regarding the management of marine mammals and the Cook Inlet Beluga's status as a candidate species for listing under the Endangered Species Act, it is especially compelling that ADNR to follow its recommendations regarding the deletions of the above tracts near rivers and prohibition of surface entry in Knik Arm.

by preserving the resource. Mitigation measure 15 provides safeguards for subsistence harvesting. It restricts lease-related activity when the commissioner determines it is necessary to prevent unreasonable conflicts. Restrictions may include alternative site selection requiring directional drilling, seasonal drilling restrictions, subsea completion techniques and other technologies deemed appropriate by the commissioner.

Mitigation measure 28 requires lessees to describe in their plans of operation permit applications efforts they have made to communicate with communities, and interested local community groups (such as the Cook Inlet Marine Mammal Council), in the development of those plans. Lessees must also include in applications for seismic permits a plan for notifying the public of their activities.

**K.7.** ADNR's cumulative impacts analysis fails to consider and discuss the reasonably foreseeable effects of the exploration licensing activities which may occur north of the lease sale area.

The "exploration-licensing only" area is no longer part of this finding. Any licensing in this area will require a separate finding.

**K.8.** The PBIF fails to discuss the impacts on Lake Clark National Park and Preserve and the Kenai National Wildlife Refuge. The PBIF recognizes these areas' special values, noting that both areas consist of undisturbed wilderness and habitat for a number of species. The enacting legislation for Lake Clark National Park and Preserve requires that it be managed, among other things, to maintain unimpaired the scenic beauty and quality of the Alaska Range and the Aleutian Range.

ADNR does not manage either area, and they are both outside of the sale area. ADNR is only required to address impacts to the sale area.

L. While the PBIF generally describes how activities that might result from the proposed lease sale could impact communities in and near the sale area, it provides no specific discussion of the impacts to communities that are not industrialized currently.

DO&G is not required to speculate about the possible future effects subject to future permitting that cannot reasonably be determined until the project or proposed use is more specifically defined. See AS 38.05.035(h). DO&G is required to describe reasonably foreseeable effects of the lease sale and subsequent activities on municipalities and communities in the sale area, but is not required

There is no discussion regarding the community impacts of oil and gas activities on private property. There are no mitigation measures regarding private property, including setbacks from residences, domestic wells, schools, or parks. The PBIF does not clarify what will happen if there are conflicts due to access restrictions. For example, can industry restrict access to a private residence if it sites a facility within 1,500 feet of the residence?

ADNR neglects to mention the duration and severity of community disruption and impact that occurs with each leasing proposal. Due to Sales 78, 85A, and 85AW, groups and individuals have been responding to threats from oil and gas leasing in the lower Inlet for at least the last eight years.

ADNR must address the potential for human and environmental health degradation; threats to indigenous/native cultures; increased dependence on money economies that can threaten subsistence activities; shock to individuals when government officials fail to exhibit appropriately neutral behaviors; risk to the highly-prized, slow-paced, peaceful and friendly community, risk to commercial fishermen and tourism; lobbying and lawsuits which increase alienation; and threats to self-concepts and the degree to which people view themselves as effective individuals.

to speculate on "impacts to communities that are not industrialized currently." Effects on communities, the environment, and its uses which are material to and within the scope of the best interest finding are described in Chapters Six and Seven.

Mitigation Measure 29 requires lessees to submit a plan of operations to the state for approval as required by 11 AAC 83.158. Where surface activities are proposed on non state-owned land, lessees must submit a copy of the plan of operations to the private surface owner. Plans of operation must describe the lessee's efforts to minimize impacts on residential areas and privately-owned surface lands. In over 40 years of Cook Inlet development there has never been a case of industry restricting access to a private residence. See Issue 4 for a discussion of private property.

See Issue 4 for a discussion of private property. Reasonably foreseeable cumulative effects of this sale are presented in Chapters Five, Six, and Seven.

Most of this is speculative and beyond the scope of this finding. Under AS 38.05.035(g)(vi) ADNR must discuss the "reasonably foreseeable cumulative effects of oil and gas exploration, development, production, and transportation on the sale area, including effects on subsistence uses, fish and wildlife habitat and populations and their uses, and historic and cultural resources." This is done in Chapter Six, "Cumulative Effects."

M.1. The discussion of fiscal effects (p. 7-7) does not specify how much of the revenues that the state received from oil and gas activities are attributed to Cook Inlet operations. Failing to specify Cook Inlet's specific contribution to the General Fund misleads commentors into thinking that revenues from Cook Inlet operations are more valuable in terms of dollars and funding of employment than is true. The finding should include Cook Inlet's past, existing, and expected contribution to the state's fiscal situation.

The finding states that North Slope fields hold 98 percent of the states known oil reserves and 90 percent of the state's known gas reserves. Annual production from Cook Inlet fields has been declining for many years. Cook Inlet production now averages approximately 32,000 bpd, down from a peak of 227,200 bpd average in 1970.

In 1998, Cook Inlet production tax and royalty revenues exceeded \$53 million or about 5 percent of the state total. According to ADOR Fall 1998 projections, Cook Inlet's proportion of the statewide total is expected to increase to 7.3 percent by 2005, 10.8 percent by 2010, 14.7 percent by 2015, and 21.2 percent by 2020 (ADOR, 1998:36).

In terms of total state revenue sources, investment earnings (34 percent) are the largest source (this includes Permanent Fund net income, Constitutional Budget Reserve Fund earnings, and General Fund interest). This is followed by federal revenue (23 percent), petroleum revenues (17 percent), non-petroleum sources (8 percent), corporation receipts (3 percent), and other sources (16 percent) (ADOR, 1998:15).

The finding fails to discuss the negative costs associated with oil and gas activities. For example, there are costs to clean up spills and contaminated sites, as well as to regulate the oil and gas industry's actions.

ADNR is not required to produce a cost – benefit analysis for oil and gas lease sales. To attempt such would be speculative and beyond the scope of this finding because there are an infinite number of variables. The director's decision is based on prudence, sound reasoning, and a thorough review of scientific data and literature, not simply a dollar tabulation of the costs and benefits of alternatives.

ADNR must project the petroleum potential in specific terms, instead of using meaningless vague labeling of "low to moderate." Once ADNR provides the petroleum potential in terms of barrels for example, it can estimate the potential for additional revenue.

DO&G is required to describe the petroleum potential of the sale area in general terms (AS 38.05.035(g)(ii)). Under AS 38.05.035(h), DO&G is not required at the leasing stage to speculate on where petroleum reserves are located or if they are present in economically viable amounts. While much is known about the resource potential of this area, reserve estimates cannot be divulged. Reserve estimates are based, in part, on data that DO&G must hold as

The discussion of local effects fails to state that local economies may suffer adverse impacts from oil and gas activities, such as lost tourism revenue.

N. If the disposal of land is part of a "multiphased" project, DNR may, in certain specified circumstances, limit its review of the project in the BIF and Conclusive Consistency Determination (CCD) to one discrete project phase (AS 38.05.035(e) and AS 46.40.094(b)). ADNR cannot claim that its failure to discuss cumulative impacts is allowed as part of its "phased" review. AS 46.40.094(a)(1) does not allow ADNR to "phase" the portion of its cumulative impacts review concerning existing development in the sale area and its impacts. It is entirely possible to evaluate at least the existing development in the area and its impacts at the lease sale stage.

**O.1.** Many mitigation measures contain language that renders compliance with them optional. If a mitigation measure is merely aspirational, the lessee cannot be required to adhere to the measure and neither ADNR nor the public can enforce the measure.

confidential in accordance with AS 38.05.035(a)(9)(c).

The finding does recognize adverse effects on municipalities and communities. See Chapter Seven. Effects on tourism and recreation are discussed in Chapter Five.

This best interest finding complies with each of the requirements set out under AS 38.05.035(g). The finding clearly discusses the reasonably foreseeable cumulative environmental impacts of the sale. See Chapters Five and Six. This includes a discussion of the potential cumulative impacts that can reasonably be determined at this time with the information available, and takes into consideration existing development. In addition, the finding contains 31 mitigation measures and 8 lessee advisories for potential impacts. In addition, ADNR adequately discussed cumulative effects in the Coastal Management Program Consistency Analysis issued March 31, 1998. This document included a discussion of the effects of existing development. Under AS 46.40.094(b), phasing is permitted when an activity is authorized or developed in phases such as oil and gas leasing, exploration, development, and production.

The mitigation measure language is not optional. As the introduction to the measures makes clear, they will be imposed on oil and gas activities as a condition of approval of plans of operation. Lessees must obtain approval of a detailed plan of operations from ADNR before conducting exploration or development activities. The plan of operations must identify the specific measures, design criteria, and construction methods and standards to be employed to comply with the restrictions in the mitigation measures. In addition to complying with the mitigation measures, lessees must comply with all applicable local, state and federal codes, statutes and regulations, and any subsequent amendments. Under mitigation measure 27, lessees must disclose any requests for exceptions to these mitigation measures and advisories in their plans of operation and applicable permit applications.

As mitigation measure 6(f) is written, it is unclear whether the lessee is required to monitor water quality that will be affected by their operations. This mitigation measure should be changed to (1) ensure that at least quarterly water quality monitoring is required, (2) down gradient of all facilities unless such a monitoring location is not geologically the best locale. In addition, there is no description of what constitutes a "permanent" facility. At what stage of development are facilities considered permanent? Is there a specified duration after which a facility is "permanent?"

Term 6(f) was proposed and debated by the Cook Inlet Sale 85A stakeholders. The stakeholders reached consensus on the wording of measure 6(f) in its current form. It would be inappropriate for DO&G to ignore the recommendations of the stakeholders.

As written, mitigation measure 7 places no restrictions on the lessee's ability to site facilities in key wetlands and sensitive habitat areas. DO&G should change this mitigation measure to wholly prohibit the siting of new facilities in key wetlands and sensitive areas. In the alternative, the word "should" needs to be changed to "must" and the phrase, "to the extent possible" needs to be clarified. As presently phrased, "to the extent possible" is vague and devoid of any meaningful standard. Failing to include language that dictates a mandatory result renders this mitigation measure meaningless.

This term was written and agreed to by the Sale 85A stakeholders. The stakeholders reached consensus on the wording of measure 7 in its current form. It would be inappropriate for DO&G to ignore the recommendations of the stakeholders.

Mitigation measure 18(b) should be changed to require that all muds and cuttings be disposed of by underground injection.

The Alaska Oil and Gas Conservation
Commission works with the EPA and DEC on
guidelines and procedures for the state's
Underground Injection Control Program.
Agency consensus is that underground injection
is the preferred method for disposal for any
waste that cannot be feasibly eliminated or
beneficially reused. Underground injection is
not an available option in all cases, but hinges
on a number of factors including the presence or
absence of freshwater aquifers and adequate
confining and receiving zones.

While lessee advisory 5(b) is a step in the right direction, it does not containing any incentive to encourage lessees to conduct research into alternative energy sources. The state should consider developing a plan to make such research more attractive by, for

Comment noted. See response to Issue 2 in Section A "Common Issues." Tax credits as an incentive for research would require legislation.

example, offering tax credits to industry.

Mitigation measure 13 requires the lessee to *design* a training program for all personnel. As written, the training program must be designed but is not required to be implemented. ADNR should require that the lessee create and implement a training program for all personnel working on lease activities.

As written, mitigation measure 28 fails to require or even encourage lessee to communicate with local communities and interested groups regarding their activities in the lease sale area. Instead it only requires disclosure of attempts to communicate. This mitigation measure should be changed to require public notification of lease activities and must set notice requirements.

As written, mitigation measure29 fails to require that lessees make efforts to minimize impacts on residential areas and privately-owned surface lands about which they later must describe in their plans of operations. The following should be added to mitigation measure 29: Lessee must minimize impacts on residential areas and privately-owned surface lands by reducing noise impacts; sight impacts; and the impact of waste disposal. The lessee must also take other reasonable and feasible actions to reduce impacts on residential areas and privately-owned surface lands.

As written, lessee advisory 6 does not require lessees to design structures to be compatible with their surroundings. ADNR should change the word "may" to "shall.". ADNR should require that structures be designed to be compatible with aesthetics in all areas, including non-populated areas and areas with local planning and zoning.

**O2.** Many terms and phrases found in the mitigation measures are undefined and/or vague. Failure to include definitions and

The measure presumes that training programs will be implemented. The mitigation measures are requirements that must be met by lessees before a plan of operations is approved.

It is the state's responsibility to ensure that public notice is given. Most lease operations require multi-agency permits which are coordinated through the Office of the Governor, Division of Governmental Coordination. ADNR coordinates public notice for single-agency permits. ADNR and DGC are currently working together to see that property owners receive timely notice of proposed activities. See response to Issue 4 in Section A "Common Issues."

What the lessee is required to do is a matter of negotiation between the lessee and the individual private property owner, and will depend on type of activity proposed and its location.

ADNR wishes to retain the discretion to determine at the plan of operations stage whether to require permanent structures to be compatible with the aesthetics of the surrounding area. ADNR cannot substitute its judgement for that of local communities with planning and zoning authority.

ADNR disagrees that the measures are undefined and vague. Most of the measures are specific, providing set buffer zone distances,

standards in the mitigation measures leaves lessee with an unclear mandate, fails to provide the public with adequate information regarding lessees' responsibilities, and makes enforceability by DO&G nearly impossible.

The following terms referenced in the text should be defined: "key wetlands" (p. 9-3), "high value wetlands" (p. 9-6), "sensitive habitat area" (p. 9-3), and "riparian habitats" (p. 9-5).

Of the various habitat classifications discussed in the PBIF, ADNR only defines "key wetlands" as those wetlands that are important to fish, waterfowl, and shorebirds because of their high value or scarcity in the region or that have been determined to function at a high level using the hydrogeomorphic approach. (p. 9-3). In contrast, ADNR fails to define what constitutes the other habitat types.

Mitigation measures fail to reference the agency responsible for determining habitat classifications and the standards the agency must use to classify habitats. DO&G must concretely define the habitat areas referred to in the mitigation measures as well as the standards an area must meet to qualify for a habitat classification.

What is the definition of the term "buffer zone" referenced in mitigation measure 9? Is it a natural area? A revegetated area? An area containing a physical barrier? Because some of these water bodies, especially wetlands, do not have defined boundaries, it is unclear from where the buffer zone should be measured.

How is the "area affected by an activity" in mitigation measure 16 defined? Is it only within the footprint area actually disturbed by dates during which activities can or cannot take place, offset distances from streams and lakes for explosives use, descriptions of areas where surface entry is prohibited, and prohibitions against a number of practices.

Key wetlands are defined in measure 8 as are those wetlands that are important to fish, waterfowl, and shorebirds because of their high value or scarcity in the region. Key wetlands are also those that have been determined to function at a high level using the hydrogeomorphic approach. High value means having desired qualities or characteristics. The definition of a riparian zone varies depending on its usage, but generally refers to the zone between wetlands and uplands.

The mitigation measures do not refer to habitat classifications but rather to environmental features such as rivers and lakes, and to areas with fixed boundaries such as state game refuges and critical habitat areas. Habitats of the sale area are described in Chapters Two and Three.

See comment above.

A buffer zone provides a protective barrier between the proposed activity, in this case oil storage facilities, and the resource being protected. It is a space within which no leaserelated activity can occur.

An area affected by an activity is an area that could be altered or otherwise impacted by an activity.

earthmoving equipment or is it broader than that because the activity's effects are not necessarily localized? ADNR should specify what constitutes the area requiring an inventory.

Mitigation measure 3 fails to specify the time frame permissible for a road to be considered "temporary," nor any time frame for removal of the road. Will the lessee be allowed to abandon using the temporary road, but not remove it until all of its activities are complete, possibly years later? ADNR must define what constitutes a "temporary" road, specifying how long it will be in place and how long is allowed for its removal.

ADNR should prohibit surface entry for all oil and gas activities, including seismic throughout each special area including all critical habitat areas, state game refuges, and recreation areas. Furthermore, ADNR should provide a ½-mile buffer zone around each special area in which all oil and gas related activities would be prohibited.

ADNR must define what constitutes "similar temporary activities." in mitigation measure 21.

Activities requiring temporary roads vary in duration. Each activity on a lease must be approved at the time an activity is proposed. Depending on the proposed use, it is possible for a "temporary" road to exist for an indefinite period. However, because mitigation measure 3 states that temporary roads must be removed, the Permitting and Compliance Unit must consider that requirement at the time a lease operations approval is requested. Lessees are required to file Completion Reports with the division twice each year. When an activity ceases, and the report is filed, the lessee must have complied with all of the requirements of the approval. It is more appropriate to regulate the temporary road measure at the lease operations approval stage.

Surface entry for drilling and above ground lease-related facilities and structures is prohibited within the Palmer Hay Flats SGR, Anchorage Coastal Wildlife Refuge, Clam Gulch CHA, Anchor River and Fritz Creek CHA, within the core Tule goose and trumpeter swan nesting and molting corridors along the Big, Kustatan, and McArthur rivers in the Trading Bay SGR and Redoubt Bay CHA, and on tidelands and wetlands in the Goose Bay SGR and Kalgin Island CHA. Oil and gas development is expressly permitted in the Trading Bay SGR and Redoubt Bay CHA. Surface entry is prohibited in parcels that are within the Kenai River Special Management Area ADNR does not allow leasing in state parks. Lessees may be required to locate facilities outside of the brown bear movement. corridors around Skilak Lake, Tustumena Lake, along the upper Anchor River drainage, and at the head of Kachemak Bay.

A temporary activity is a low impact activity that lasts for a limited time, not exceeding three years, and usually refers to development and The responsibilities of the lessee regarding abandonment requirements under mitigation measure 21(h) are unclear. The mitigation measure fails to specify the time frame for which removal or rehabilitation must be completed after abandonment or expiration of the lease. Consequently, the lessee could abandon the site without immediately completing the removal or rehabilitation work that further impacts the site and wildlife. ADNR must outline the lessee's specific removal and rehabilitation.

As written lessee advisory 2 fails to specify whether lessee must notify the public of all its lease related activities or just of its seismic activities. ADNR should require that the lessee notify the public of all its lease related activities and provide specific notice requirements.

Regarding mitigation measure 6, the PBIF should require natural buffers and screening around every facility regardless of its location and regardless of whether the facilities are new or existing. This measure should mandate size requirements for the "natural buffers." Additionally, the phrase "alternative techniques" is vague, and thus, should be more specifically described.

Measure 20 is vague because it does not describe what constitutes an "efficient manner." Is efficiency related to cost or to ease of developing the field? As written the measure prioritizes development of the field over preventing disturbance to the land. Any final finding must provide substantive and clear guidance so lessee can determine the extent to which it may mine for gravel.

Regarding measure 24, ADNR should define the types of activities that are considered temporary, the length of time they may be allowed, and require that the lessee obtain approval to temporary activities from USFWS construction activity.

Lessees have a contractual responsibility to see that all sites are "rehabilitated by the lessee to the satisfaction of the state... "That must be done "upon the expiration or earlier termination" of the lease.

For a discussion of the public notification process for permit applications see Chapter Eight.

Measure 6(a) was written and agreed to by Sale 85A stakeholders. The intent of the term is to protect rivers and riverbanks. The stakeholders did not mandate size requirements for the buffers, as these should be determined on a case-by-case basis. Alternate techniques would be other than buffers and seasonal restrictions that would nevertheless achieve the goals of the measure.

Efficiency is related to the "feasible and prudent" standard of the Alaska Coastal Management Program. Feasible and prudent is defined to mean "consistent with sound engineering practice and not causing environmental, social, or economic problems that outweigh the public benefit to be derived from compliance with the standard which is modified by the term 'feasible and prudent." 6 AAC 80.900(a)(20).

Under the terms of a lease, the lessee has the right to develop the leasehold interest for the development of oil and gas resources. However, all leasehold improvements are considered to be temporary. Upon expiration of the lease, the

prior to initiating any activities.

Mitigation measure 21f requires the facilities in special areas be designed and constructed to prevent the spill and spread of hydrocarbons, to facilitate cleanup efforts and to minimize the possibility of spills or fires resulting from vandalism or hunting accidents (p. 9-7). As written, the PBIF fails to reference standards for design and construction of this type. Any final finding should require that all new facilities be designed according to American Petroleum Institute standards.

**O.3.a.** The PBIF expressly provides two methods that the lessees may use to seek an exception from the mitigation measures. First, the Director of DO&G, in consultation with ADNR and the public, has the blanket authority to grant exceptions from mitigation measures. (p. 9-2). Second, the lessee may receive an exception to all mitigation measures noted with an asterisk (\*) after DO&G consults with the noted agency. (p. 9-2). Third, the PBIF also contains other exceptions that are written into the language of the mitigation measures, but not necessarily noted as measures containing exceptions. Confusion lies in the relationship between the three types of exceptions. Is there a hierarchy among the different exception types? Which type takes precedent? Regarding the third type of exception, the ADNR should clarify whether such exceptions fall under DO&G's blanket authority to grant exceptions, whether DO&G can grant an exception after consultation with another agency, or whether this is a separate and distinct method of obtaining an exception.

**O.3.b.** Regarding the exceptions above, the PBIF fails to specify how public review of the exception request will occur because there is no notice requirement for review of plans of operations. ADNR must require public notice and participation for review of plans of operations to ensure meaningful public review of any and all requests for exceptions from the

lessee must rehabilitate the site and return it to the state in a condition satisfactory to the state.

ADNR is in the process of promulgating regulations that will incorporate relevant API Recommended Practices into the administrative code.

The Director does not have blanket authority to grant exceptions. The Director's decision whether to grant an exception will not be made without review by the public and appropriate state agencies, as noted by the asterisks after some of the measures. The mitigation measures for this sale do not allow exceptions for all measures. Only seven of the 31 mitigation measures for the Cook Inlet Areawide sale allow exceptions.

For a discussion of the public notification process for permit applications, see Chapter Eight. See also the following response.

mitigation measures. The PBIF specifies that ADNR can only grant an exception if the mitigation measure is within ADNR's authority, but it is unclear which measures are within ADNR's authority. The finding should clarify if this authority extends to all measures that are not noted with an (\*) and a consulting agency.

The Director of DO&G may grant an exception if compliance with the measure is not "feasible or prudent" or an "equal or better alternative is offered." The PBIF does not define "feasible or prudent" and fails to specify whether this standard regards technological and/or economic feasibility. In addition, the PBIF does not define what constitutes an "equal of better alternative."

The ability to allow for exceptions is envisioned by the ACMP, which contains numerous standards modified by the term "feasible and prudent." Feasible and prudent language is also found in district coastal management plans. "Feasible and prudent" is defined to mean "consistent with sound engineering practice and not causing environmental, social, or economic problems that outweigh the public benefit to be derived from compliance with the standard which is modified by the term 'feasible and prudent.' 6 AAC 80.900(a)(20). This qualifier allows agencies to balance between environmental concerns, social and economic problems, and the public benefits to be derived by less than full compliance with the standard. It also creates future flexibility for dealing with currently unknown or unforeseen circumstances. Thus, absolute prohibitions on activities may or may not be a feasible or prudent alternative. As the introduction to the measures makes clear, for those mitigation that are within ADNR's authority, the lessee may request, and the Director of DO&G may grant, exceptions if compliance with the mitigation measures is not feasible or prudent, or an equal or better alternative is offered. Requests and justifications for exceptions must be included in the initial plan of operations when one is required. The decision whether to grant an exception will be based on the review of the plan of operations by the public and state agencies, and will depend on the comments received.

**O.3.c.** In addition to the Director's blanket authority, lessee may be granted an exception to all mitigation measures noted with an (\*) on the conditions that ADNR: (1) consults with the listed agency in any decision to grant an exception; and (2) all the agencies in consultation agree to allow the exception. (p.

See above response and the response to 3.a.

9-2). Allowing lessees to escape from the above mitigation measures defeats the purpose of requiring mitigation and compromises the best interests of the state and its residents. ADNR should specify the procedures that govern requests for exceptions and provide for public notice and the opportunity to review requests for exceptions. If ADNR claims that it is absolutely necessary to allow exceptions to mitigation measures, any final finding must clearly describe under what conditions a lessee may be granted an exception, what public process governs the request, and which agency will be responsible for granting the exception.

**P.1.** Any mitigation measure that is applicable to special areas should apply throughout the sale area, regardless of special designation.

Most of the measures that apply to special areas prohibit or severely restrict surface entry. Applying these restrictions throughout the sale area would effectively preclude oil and gas leasing, exploration and development in Cook Inlet.

**P.2.a.** Mitigation measures should reference the regulations lessees must comply with in order to obtain the right to enter private property. Without referencing the applicable regulations, private landowners may be unaware of their rights. Prohibit surface entry onto private property without owner approval, unless it is impossible to access from off-tract.

See response to Issue 4 in Section A "Common Issues."

Require the lessees to provide at least a 500 foot setback from all private property, schools, parks, and other areas of community importance.

Applying this recommendation would have the effect of closing much of the lease sale area to oil and gas development. Urban and suburban development have coexisted with oil and gas development in the Cook Inlet region for years without mandatory setbacks from wells, buildings, private property, schools and parks.

Require the lessees to minimize sight and sound impacts for new facilities sited less than ½-mile from private property, schools, parks, and other areas of community importance.

ADNR does not believe this is necessary to protect values, because all facilities must be approved by ACMP review process, which includes public comment. Sight and sound impacts are addressed more appropriately when a facility is proposed. Only then can potentially affected community buildings and residences be identified in relation to the proposed project, and affected individuals can come forward with

Require the lessees, upon abandonment or expiration of lease activities, to fully restore and rehabilitate any impacts made by surface entry onto private land.

**P.2.b.** mitigation measures fail to provide any explicit protections for sea otters, harbor seals, harbor porpoises, killer whales, moose, bears, Dall sheep, mountain goats, wolves, Steller sea lions, Steller eider's, or beluga whales.

ADNR should incorporate the Interagency Brown Bear Study Team's preliminary results and anticipated results of the research to date into the PBIF, and particularly into the mitigation measures. To protect the brown bears ADNR should, at minimum, add the following mitigation measures to any final finding: (1) lessees are prohibited from road-building into and near bear habitat and travel corridors; (2) lessees are prohibited from conducting seismic activities bear denning habitat; and (3) lessees are required to use fuel fired incineration of solid wastes at all sites of activities.

comments and concerns.

Lessee/surface owner interaction is addressed by existing statutes and regulation. On private lands, a lessee must obtain approval of the landowner before any proposed operations commence. If the two cannot reach agreement, the landowner may request ADNR to require the lessee to post a bond in an amount sufficient to cover potential damages (see AS 38.05.125. Reservation; AS 38.05.130. Damages and Posting of Bond; and 11 AAC 96.140(10).

Mitigation measures for brown bears were developed during the ACMP consistency review for the sale. See measures 30 and 31 and lessee advisories seven and eight. No portion of the sale area includes identified Dall sheep habitat. Measure 11(c) was designed to protect moose. There is no evidence that oil and gas leasing will impact the mountain goat and wolf populations in the sale area. Specific measures to protect mountain goats and wolves, if necessary, can be developed at the permitting phase. Protection of beluga whales, killer whales and Steller sea lions falls under NMFS' jurisdiction. ADNR does not believe mitigation measures are necessary at the lease sale phase to protect sea otters, seals, porpoises, or Steller's eiders, due to the low risk of adverse impact resulting from the sale. See Chapter Six "Cumulative Effects."

See response to Issue 6 in Section A "Common Issues." For a discussion of effects on bears, see Chapter Six. It may not be appropriate to incinerate refuse at all times at all locations. See mitigation measures 30 and 31, and lessee advisories 7 and 8.

The mitigation measures also fail to take noise disturbances into account.

The level of specificity called for by this recommendation is appropriate for consideration at the permitting phase, when specific projects are proposed for specific locations, not the lease sale phase.

Lessee advisory 4 provides for a minimum altitude and horizontal distance flight restrictions to protect birds. A similar measure to protect mountain goats should be incorporated as follows: (1) helicopters should remain 2 km away from goat herds; (2) a buffer zone of 2 km should be created around alpine areas and cliffs known to support mountain goat populations; (3) aerial traffic should be directed away from goat alpine habitat; (4) seismic lines should not be created in goat habitat; and (5) in cases where helicopters must infringe on goat habitats aircraft should stay more than 300 meters above ground level and not land on treeless ridges.

ADNR has not found any scientific justification for these restrictions. Furthermore, ADNR does not have the authority to restrict aircraft overflights. This term is advisory only.

The mitigation measures also fail to place any restrictions on development at the mouths of salmon streams. Because of the importance of this habitat to returning salmon, the mitigation measures should prohibit surface entry at the mouths of salmon streams.

Mitigation Measure 15 restricts lease-related use when the commissioner determines it is necessary to prevent unreasonable conflicts with local subsistence harvests and commercial fishing operations. Restrictions may include alternative site selection requiring directional drilling, seasonal drilling restrictions, subsea completion techniques and other technologies deemed appropriate by the commissioner.

P.2.c. Mitigation measures should provide the same protection for tourism operations and local recreators as the measures do for commercial fisheries and subsistence harvests. Proposes the following measure: Lease-related use will be restricted when the commissioner determines it is necessary to prevent unreasonable conflicts with local recreators and tourism operations. In enforcing this term the division, during review of plans of operation or development, will work with other agencies and the public to assure that potential conflicts are identified and avoided. In order to avoid conflicts with tourism and

ADNR does not foresee adverse impacts on recreational uses as a result of this lease sale. Oil and gas and recreation and tourism have co-existed in Cook Inlet for nearly 40 years. Both industries have grown simultaneously. If special measures are required to protect recreational uses, they can be imposed at the plan of operations stage after lessees have consulted with local communities and interested local community groups. It is anticipated that these communications will allow for identification of potential conflicts between oil and gas and recreation when a specific activity is proposed for a specific location

recreation activities, restrictions may include alternative site selection, requiring directional drilling, seasonal drilling restrictions, subsea completion techniques, and other technologies deemed appropriate by the commissioner.

**P.2.d.** mitigation measures should state that all structures be built in accordance with Uniform Building Code specifications for seismic zone 4 (as referenced on p. 5-4).

See response to E.1., regarding Uniform Building Code and seismic zone 4.

**P.2.e** Mitigation measure 6(e) should also prohibit lessees from placing drilling rigs and lease-related facilities within ½-mile of the floodplains of all rivers and creeks in the lease sale area, not just the Kenai River.

Comment noted. See response to Issue 5 in Section A "Common Issues."

**P.2.f.** Any final finding should include a mitigation measure which requires the lessee to incorporate all of the PBIF's suggested visual management considerations (p. 5-37) for new facilities when feasible and reasonable.

The level of specificity called for by this recommendation is appropriate for consideration at the permitting phase, when specific projects are proposed for specific locations, not the lease sale phase.

**P.2.g.** The mitigation measures should require lessees to use non-toxic fluids during all phases of drilling to protect drinking water aquifers.

Under AS 31.05.030, AOGCC may require the casing of wells to prevent pollution of fresh water supplies. The purpose of the statute is to protect drinking water. In addition, state regulation (20 AAC 25.030) specifically requires that a surface casing be set below drinking water level and cemented thus preventing drilling fluids from mixing with drinking water. Drinking water aquifers are adequately protected by statute and regulations, therefore a mitigation measure is unnecessary.

III.A. The Lease Sale Violates the Coastal Development Standard Because Oil and Gas Activities Are Not "Water-Dependent." In applying the coastal development standard to this sale, ADNR finds that many of the post-lease sale activities (e.g., offshore platforms or docks) that lessees may propose are either water-dependent or water-related under 6 AAC 80.040. Many of the mitigation measures and lessee advisories for this sale are designed to minimize or eliminate the effects of oil and gas development on other water-dependent and water-related activities in the area. ADNR will condition any plans of operation issued following this sale with at a minimum these

mitigation measures and lessee advisories.

This sale does not violate the ACMP subsistence standard, 6 AAC 80.120, because there are no designated subsistence zones in the sale area, and the sale's mitigation measures and lessee advisories and any other conditions attached to subsequent plans of operation adequately assure opportunities for subsistence usage.

See responses to Issues 1 and 2 in Section A "Common Issues." Mitigation measures and lessee advisories, and any other conditions attached to subsequent plans of operation are designed to minimize effects of oil and gas development on Cook Inlet habitats.

Cook Inlet Areawide Lease Sale Violates the ACMP Subsistence and Habitat Standards because ADNR has not demonstrated "Significant Public Need" for the lease sale; ADNR has hot demonstrated that there are no feasible alternatives to the sale; and ADNR has not demonstrated that it took all feasible and prudent steps to maximize conformance with the habitats standard.

See response to Issues 1 and 2 in Section A "Common Issues." ADNR has taken all necessary steps to ensure conformance with the Habitats Standard.

**III.B.** The Cook Inlet Areawide lease sale violates KPBCMP policies 2.7 (consideration of cumulative effects) and 12.8 (protection of beluga whale migration and feeding areas).

See response to Issue 8 in Section A "Common Issues."

III.C. The Cook Inlet Areawide lease sale violates enforceable goals and policies of the Municipality of Anchorage Coastal Management Program. ADNR should require that the lessees comply with the goals and policies for Zone R-3 prohibiting oil and gas activities within residential areas.

See response to Issue 8 in Section A "Common Issues."

IV. We urge the ADNR to conclude that the proposed Cook Inlet Areawide Lease Sale does not comply with the requirements listed in AS 38.05.035(g), the standards of the Alaska Coastal Management Program, the policies of the Kenai Peninsula Borough Coastal Management Program, the Municipality of Anchorage Coastal

Comment noted. See response to Issue 8 in Section A "Common Issues."

Management Plan. We urge ADNR to cancel
the proposed lease sale or the sale should be
deferred until ADNR has completed a
comprehensive cumulative impacts analysis
for the entire sale area.

## 6. Public Comments

6. Public Comments John Allen, Anchorage, 6/25/98	
Supports Cook Inlet Areawide lease sale. Private free enterprise is the bedrock of our economy. The oil industry has made great stride in environmental management and continuous progress is now the standard.	Comment noted.
Tom Anglen, Eagle River, 6/25/98	
Supports Cook Inlet Areawide lease sale. Industry's environmental record has been good over the last 25-30 years. The oil and fishing industries are quite capable of coexisting and providing a good future for all Alaskans.	Comment noted.
Jeff Arndt, Sutton, 5/1/98	
Opposed to Cook Inlet Areawide lease sale. ADNR is not required to hold this sale, and with the Cook Inlet basin holding only 2 percent of the state's oil reserves, which are rated to have a "low to moderate" petroleum potential, it hardly seems worth the environmental risks.	There is significant public need for the revenue and energy that areawide leasing will generate due to the decline of oil production on the North Slope and in Cook Inlet. From Talkeetna to Homer, Cook Inlet natural gas is needed to heat homes and businesses, and provide electric power for society to function. Existing users, like the Tesoro refinery, Unocal's urea and ammonia plant, Phillips' LNG plant, and Enstar (serving residences and businesses) will need oil and gas to meet future energy needs. As a result, significant benefits could result from the Cook Inlet Areawide Sale at the state and local level. See Chapter Seven "Fiscal Effects," and the ACMP Analysis for a discussion of the importance of oil and gas revenue to the state economy. The potential benefits outweigh the risks of the sale.
Delete all special and sensitive areas, subsistence areas, and commercial fishing areas.	See response to Issue 3 in Section A "Common Issues."
By law, ADNR must conduct a cumulative impacts analysis that considers all past and	ADNR considered cumulative effects including past and future effects to the extent reasonably

future effects of development, and must exempt all private property from any sale.	foreseeable. See Chapters Five, Six, Seven and the ACMP analysis. Regarding the inclusion of private property in the sale, see response to Issue 4 in Section A "Common Issues."	
The 2 billion gallons of produced water and 3.3 million gallons of drilling mud discharged into the Inlet is enough. Require zero discharge in the lease contract.	Effects of oil and gas activities on Cook Inlet marine water quality is discussed in Chapter Five. See response to Issue 9 in Section A "Common Issues."	
Require ½ mile drilling setbacks from the floodplains of rivers and streams.	Comment noted. See response to Issue 5 in Section A "Common Issues."	
Prohibit the export of oil and gas from Alaska, so it can be used here, while we try to develop renewable energy sources.	Comment noted. See response to Issues 1 and 2 in Section A "Common Issues."	
David Argetsinger, Anchorage, 6/26/98		
Supports Cook Inlet Areawide lease sale. There is nothing more reassuring for the future of the Cook Inlet area as the sight of a producing oil or gas well.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Current technology and a record of past operations assures that oil and gas exploration and development can be conducted anywhere in Cook Inlet without threat of environmental damage or harm	Cumulative effects of oil and gas activities are discussed in Chapters Five, Six, and Seven.	
The tourist experience in the Alaska "wilderness" includes not only the opportunity to view wildlife but also to view a working oil or gas well.	Cumulative effects of oil and gas activity on scenic resources and tourism are discussed in Chapter Five.	
Conrad Bagne, 4/30/98		
Supports Cook Inlet Areawide lease sale. Industry provides benefits through jobs and a stable source of natural gas. Industry has demonstrated that it can operate safely in the Inlet.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
The state has demonstrated that it can administer a reasonable system of regulations that ensure the Industry operates properly.	Comment noted.	

Oil development can coexist with other resource activities, including commercial, subsistence and sport fishing.

Oil and gas exploration, extraction, and processing has coexisted with other uses of the sale area for more than 40 years with no long-term adverse impacts to resource values. See discussion of effects in Chapters Five, Six, and Seven.

# Edgar Bailey and Nina Faust, Homer, 5/14/98

Areawide leasing could be useful if the State really considered public comment in more than just a token fashion. Removing tracts south of latitude 59 degrees near Ninilchik, as was done in Lease Sale 78 and in Sale 85A, would have shown meaningful consideration of the comments of more than 500 people regarding oil and gas leasing on the southern Peninsula less than a year ago.

For a description of public involvement in the development of this sale, see Chapter One. ADNR carefully considered all oral and written comments regarding this lease sale decision. No public input has been ignored. ADNR takes the comments of residents seriously and includes them in the best interest finding. Comments and information received during the sale process are used to draft appropriate mitigation measures to ensure that values are protected. ADNR also considers foreseeable long-term impacts and attempts to balance the concerns of individuals with the best interests of the state. In some cases, when concerns outweigh benefits, tracts have been deleted from a sale. In response to the concerns voiced in Homer, several tracts close to Homer and Kachemak Bay have been removed from the original sale area. ADNR is aware of opposition to the sale from some people on the Lower Peninsula. However, the sale also has a great deal of support and ADNR must consider the best interests of the entire state in making its decision.

Delete private property or at the very least prohibit on-site drilling on private property.

See response to Issue 4 in Section A "Common Issues."

All property owners within ½ mile of any drilling should be notified. Even the Borough notifies all property owners within ½ mile of proposed gravel pits.

As noted in response to Issue 4, all property owners within ½-mile of any proposed drilling must be notified.

Oil and gas drilling certainly will have just as significant an impact as a gravel pit.

Effects of oil and gas activities are discussed in Chapters Five, Six, and Seven.

Regarding the ACMP Consistency Analysis, KPB Policy 2.4, Proposed Measure 7: (p. 43) Mitigation does not usually compensate for wetland damage; so keep oil and gas development out of wetlands.

Comment noted. See response to Issue 8 in Section A "Common Issues." Mitigation can compensate for wetland damage, acre for acre. For example, Marathon Oil Company created 40 acres of wetlands to mitigate habitat damage to the Poppy Lane waste site in Soldotna. In order to mitigate habitat alteration to Anchorage wetlands from the construction of an aviation fuel pipeline, the contractor improved fish access to Chester Creek, and provided funding to purchase rare Anchorage wetlands threatened by residential development.

Revisit the question of cumulative impacts, including escalating logging activities on locally stressed brown bears.

DO&G is only required to discuss the cumulative impacts of oil and gas activities. Their effects on brown bears are discussed in Chapter Six. See also response to Issue 6 in Section A "Common Issues."

Oil and gas development should be prohibited in floodplains of major rivers.

See response to Issue 5 in Section A "Common Issues."

Delete offshore areas south of Kalgin Island.

See response to Issue 3 in Section A "Common Issues."

We do not support any additional offshore drilling in the Inlet because of the lack of an adequate oil tanker safety plan and the industry's refusal to go along with zero discharge. ADNR is satisfied with the efforts directed toward oil spill prevention and response in Cook Inlet. Improvements continue to be made in planning and technology. State and federal agencies, industry, and concerned citizens groups are working together to prepare geographic response plans, which will describe site-specific response strategies for the Inlet. See Chapter Five for additional oil spill discussion information. Cumulative effects of marine discharge on Cook Inlet water quality are discussed in Chapter Five. See also response to Issue 9 in Section A "Common Issues."

Fred Bakun, 6/25/98		
Supports Cook Inlet Areawide lease sale. The oil and gas industry has a proven track record of safely and cleanly developing Alaska's hydrocarbon resources. Areawide sales should proceed and Alaska should continue to benefit from its natural resources.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Allen E. Baldwin, Kasilof, 5/13/98		
Supports Cook Inlet Areawide lease sale. Oil and gas production helps pay property tax and supports thousands of jobs.	Comment noted. See response to Issue 10 in Section A "Common Issues." Jobs and fiscal effects of leasing are discussed in Chapter Seven. Property taxes are discussed in the effects on municipalities and communities section, Chapter Seven.	
Terri Barefield, 6/25/98		
Supports Cook Inlet Areawide lease sale. Industry and the environment are compatible.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
John Barnes, Anchorage, 6/29/98		
Supports Cook Inlet Areawide lease sale. The oil and gas industry has demonstrated development can occur with appropriate recognition of safety and environmental concerns. There is no reason to slow down this lease sale process or burden it with unnecessary restrictions.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Norm Berge, Soldotna, 6/29/98		
Supports Cook Inlet Areawide lease sale. Cook Inlet oil and gas production contributes a lot of money to the Kenai Peninsula and Southcentral Alaska. Continued development is important for future Alaskans.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
John W. Bishop, 6/26/98		
Supports Cook Inlet Areawide lease sale. The oil industry has a good record of responsibly producing oil and gas and will continue to do so.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
	1	

#### Daniel O. Blanchard, Soldotna, 6/25/98

Supports Cook Inlet Areawide leasing. Commercial and sport fishing activities are compatible with offshore development. The industry has the ability and desire to protect our Alaskan environment and way of life. Comment Noted. See Issue 10 in Section A "Common Issues."

### Susan Grace Blandin, Girdwood, 4/29/98

Opposed to Cook Inlet Areawide lease sale. The destruction of critical habitat areas, wildlife refuges, high value wetlands, subsistence areas, and fishing and recreation areas must stop. Drilling will destroy this vast ecosystem.

The history of the Cook Inlet area over the last forty years has shown that fishing, timber, tourism, recreation, subsistence, and mining, including oil and gas, can coexist and support one another. The challenge is to balance these competing uses and to assure that development is done with minimum impact to the environment. Surface entry is prohibited in recreation areas and in portions of some critical habitat areas. Restrictions on oil and gas activities apply to many special areas, such as tidelands, rivers, and lakes (see Chapter Nine). See also response to Issue 3 in Section A "Common Issues."

Develop an energy policy based on renewable energy sources such as wind, tidal, and solar generation. See response to Issue 2 in Section A "Common Issues."

A cumulative impacts analysis must consider the devastating effects of past and existing development.

The BIF contains a discussion of the reasonably foreseeable cumulative effects of leasing on the sale area, including effects on water and air quality, land habitats, lower trophic levels, fish, birds, marine mammals, terrestrial animals, cultural and historic resources, and subsistence uses (See Chapters Five and Six).

Cook Inlet is the only coastal area in the U.S. which allows operators to discharge 5.3 million gallons of clays and chemicals and water containing oil and grease. The people demand zero discharge.

See response to Issue 9 in Section A "Common Issues."

Require ½-mile setbacks from floodplains of rivers and streams.

See response to Issue 5 in Section A "Common Issues."

Only the big oil companies will benefit, the people and wildlife of this vast last frontier suffer the consequences.

See Chapter Seven "Fiscal Effects," and the ACMP Analysis for a discussion of the importance of oil and gas revenue to the state economy.

#### Rob Borchgrevink, Nikiski, 6/29/98

Supports Cook Inlet Areawide lease sale. We should continue oil and gas leasing to ensure the stability of many jobs. We can have

Comment noted.

environmentally sound oil and gas development without affecting the environment.	
Steve Borell, Anchorage, 5/27/98	
Supports Cook Inlet Areawide lease sale.	Comment noted.
Erick Borland, Anchorage, 5/28/98	
Supports Cook Inlet Areawide lease sale. Cook Inlet oil and gas is produced and refined locally with products used in homes, businesses, and automobiles. Both oil and gas go to Alaskans at prices below the national average.	Comment noted.
Cook Inlet oil production is down from 225,000 barrels a day to 40,000 and the industry needs to rebuild if it is to remain a principal support of our economy.	Comment noted.
Areawide leasing – a method of streamlining permitting for exploration and development – was unanimously approved by the Alaska legislature in 1996, and its time has come.	Comment noted.
Janet Bounds, Anchorage, 4/30/98	
Supports Cook Inlet Areawide lease sale. Royalty revenue provides a buffer zone to allow state leaders a safety net while seeking out other opportunities for expanding Alaska's economic base.	Comment noted. See Chapter Seven, "Fiscal Effects."
The oil and gas industry promotes education, performing arts, recreational opportunities, active community involvement, stable employment opportunities, a healthy environment and state economy. Areawide sales will help maintain our current standard of living.	Comment noted. See Chapter Seven, "Fiscal Effects."

James Bragg, Anchorage, 625/98		
Supports Cook Inlet Areawide lease sale. I currently have a panoramic view of Cook Inlet, Fire Island, Turnagain Arm, Mt. Redoubt, Mt. Iliamna, the Alaska Range and on winter nights, the lights and flares of offshore production platforms are visible. This is truly a beautiful sight to behold; modern oil production technology and the Alaska wilderness working/coexisting in harmony.	Comment noted.	
Tom Brennan, 6/17/98		
Supports Cook Inlet Areawide lease sale. Future Alaskans will need jobs.	Comment noted. See Chapter Seven, "Fiscal Effects."	
Michael A. Brogan, Anchorage, 4/28/98		
Supports Cook Inlet Areawide lease sale. This program will give us an additional element of security regarding consistent and predictable sales programs, and thus improve our ability to compete for development in a worldwide market.	Comment noted.	
Areawide leasing will also reduce costs for state government due to greater efficiency, and therefore will reduce state spending.	Comment noted.	
Doug Brown, Kenai, 6/29/98		
Supports Cook Inlet Areawide lease sale. The industry has proven it knows how to develop the Cook Inlet in a clean, healthy, safe manner.  Kevin K. Bruce, Anchorage, 5/26/98	Comment noted.	
Supports Cook Inlet Areawide lease sale. While enjoying the outdoors, I have spent several weeks exploring the Swanson River trail system. That would not have been possible without the access made possible by the way the oil and gas industry has developed our local fields. I, like all my neighbors, rely on gas to heat my home at a reasonable cost. This is possible only because the industry has developed our local fields. Further development will only bring us greater benefits.	Comment noted. See Chapter Seven, "Fiscal Effects."	

Lynda M. Buechner, Anchorage, 4/28/98		
Supports Cook Inlet Areawide lease sale. Industry has consistently improved their safety and environmental record over the last forty years.	Comment noted.	
Industry has brought economic security to more than 1,600 people through local hire and training programs.	Comment noted. See Chapter Seven, "Fiscal Effects."	
Industry supports us not only by providing jobs, but also by providing generous financial donations to local community efforts as well as supporting employee's efforts in volunteering services to local agencies.	Comment noted. See Chapter Seven, "Fiscal Effects."	
Energy bills here are lower than most anywhere else in the lower 48.	Comment noted.	
Michael Carpenter, Kenai, 5/1/98		
Supports Cook Inlet Areawide lease sale. Oil and gas helps pay property tax and supports thousands of jobs. Oil and gas provides inexpensive electricity and the Cook Inlet remains as beautiful and clean as it was many years ago.	Comment noted. See Chapter Seven, "Fiscal Effects."	
I support the special interest findings on the Areawide Oil and Gas Lease Sale and I'm also a Commercial Fisherman in the Cook Inlet.	Comment noted. The director has determined this sale to be in the best interests of the state.	
Steve Carson, Anchorage, 4/30/98		
Supports Cook Inlet Areawide lease sale.	Comment noted.	
Bret Chambers,		
Supports Cook Inlet Areawide leasing. Additional bonuses/royalties/taxes will help pay for good roads, parks, schools and the university of Alaska.	Comment noted. See Chapter Seven, "Fiscal Effects."	
Offshore development can be done without damaging the environment with zero discharge platforms, extended-reach drilling to new offshore fields from onshore pads, buffer zones, monitoring and following existing laws and permit restrictions.	Comment noted.	

Cities near the Cook Inlet may need additional sources of clean gas over the next 50 years.	Comment noted.
Brad Chastain, Anchorage, 6/26/98	
Supports Cook Inlet Areawide lease sale. Attended workshops and supports "stakeholders" group approach to developing consensus. Areawide leasing is providing the best stewardship for our natural resources.	Comment noted. See Issue 10 in Section A "Common Issues."
Kevin Clement, Homer, 6/23/98	
Opposed to oil and gas leasing. Southern Peninsula residents do not want oil exploration and development in their area. We do not believe the promises of the oil companies that their work will not harm the environment. We do not believe that your mitigation measures will protect what we hold dear.	As a balancing agency, DO&G believes that multiple use can occur on state lands and that oil and gas can coexist with other uses. DO&G is aware of opposition to this sale. The sale has also received a great deal of support. Mitigation measures are designed to protect environmental quality. Additional restrictions may be imposed at the plan of operations stage of exploration and development.
Having attended lease sale meetings in Homer, no one could doubt that this feeling is almost unanimous among Homerites. Our protests have gone repeatedly and offhandedly ignored.	DO&G is aware of opposition to the sale, and has taken steps to address the concerns of Homer residents. These are reflected in the 31 mitigation measures and eight Lessee Advisories.
Remove tracts from the Lower Peninsula and in Lower Cook Inlet to disprove us and show that we really do have a participatory democracy in this state.	The decision to offer state lands for oil and gas leasing is ultimately made with the interests of all Alaskans considered. Removing Lower Peninsula tracts while preferable to certain individuals, has been determined to not be in the best interests of all Alaskans.
You say that mitigation measures were added and the sale area adjusted in response to public commentary. I say, not enough. You say we can have both oil development and a clean environment. I say, no one with eyes would believe that. Moving forward with the sale will further deepen the distrust those people are now feeling toward your organization.	Comment noted.
William Coghill, Soldotna, 4/30/98	
Supports Cook Inlet Areawide lease sale. Advances in the last four decades reduces impact to the environment and industry's	Comment noted. See response to Issue 10 in Section A "Common Issues."

safety record continues to get better.	
Joel Cooper, Homer, 6/29/98	
Opposed to Cook Inlet Areawide lease sale. DO&G is not considering our actual need for oil and gas resources, but rather is looking purely at economic gain. We presently do not have a demand for oil and resources that requires this much leasing.	Comment noted. See response to Issues 1 and 10 in Section A "Common Issues."
DO&G is not considering alternative energy sources that would be less harmful to the environment. Just because you are the DO&G doesn't mean you can't work with other energy sources that are cleaner and do not put land, water, air, fish and wildlife at risk.	See response to Issue 2 in Section A "Common Issues."
DO&G does not have enough sense to take out extremely biological sensitive areas such as the Tuxedni Bay area, the Kenai River, and the countless other important waterbodies in the area.	Comment noted. Given these measures and advisories in addition to existing law, it is not necessary to delete subsurface acreage from the sale. Habitat values of Tuxedni Bay and the Kenai River watershed are protected. See response to Issue 3 in Section A "Common Issues."
DO&G and the state should look into income and sales taxes to take the place of oil and gas revenues, In particular, to replace revenues that would be generated from lease sales in biologically sensitive areas.	This is a matter for the legislature to consider. Both income and sales taxes would need to be considered and passed by the legislative branch.
Nora Cousens, Petaluma, California, et a	al., 5/15/98 <i>(see end note)</i>
We do not believe this lease proposal is in the best interest of either the people of Alaska or the remaining critical habitat areas.	Comment noted. See response to Issues 1 and 3 in Section A "Common Issues."
As a geophysicist, you must be aware that allowing drilling to take place ½-mile from major rivers will not be adequate protection in the event of flooding.	See response to Issue 5 in Section A "Common Issues."
The proposal to drill 500 feet from salmon streams threatens habitat.	Mitigation Measures 6 and 17 are designed to minimize impacts on salmon streams and habitat. Similar measures have proven effective in past oil and gas lease sales.

Not only has there been no effort to remove all sensitive areas from the proposed lease, such as wildlife refuges, wetlands, fishing areas and recreational preserves, but drilling rigs will have the right to enter private land to access subsurface minerals.	Comment noted. See response to Issues 3, 4, and 5 in Section A "Common Issues."
It is shortsighted of the State of Alaska to continue to rely on revenues from non-renewable resources for its budget. Create an energy policy focused on solar power generation and renewable energy sources. Use the remaining oil and gas as an interim measure during the transition to a sustainable economy for the 21st century.	Comment noted. See response to Issue 2 in Section A "Common Issues."
It is wiser to design a future, which will not result in the depletion of our remaining wild and open spaces.	Comment noted.
William M. Cox, Anchorage, 6/6/96	
Opposed to Cook Inlet Areawide lease sale. ADNR is not required to hold this sale and there is no pressing need for it.	Comment noted. See response to Issue 1 in Section A "Common Issues."
Delete critical habitat areas, high value wetlands, recreational areas, subsistence areas, commercial fishing areas, and private property. Require setbacks of at least ½-mile from the floodplains of rivers and streams. Require zero discharge in Cook Inlet. Weave this sale into a State energy policy that includes consideration of renewable energy resources.	Comment noted. See response to Issues 2, 3, 4, 5 and 9 in Section A "Common Issues."
Krissell Crandall, 6/25/98	
Supports Cook Inlet Areawide lease sale. It is important that sales be held on a timely basis. Timely sales are more likely to result in higher revenues to the state.	Comment noted. See response to Issue 10 in Section A "Common Issues."
Brian Crockett, Seattle WA, 6/26/98	
Former Alaskan supports Cook Inlet Areawide lease sale. Appreciates the benefits that oil and gas brings to Alaskans, such as the permanent fund dividend, and no sales tax.	Comment noted. See response to Issue 10 in Section A "Common Issues."

During the 30 years the platforms have been producing in Cook Inlet, tourism, commercial and sports fishing has grown	Comment noted. See Chapter Four "Current and Projected Uses."	
When ARCO drilled a well at Big Lake years ago, local businesses were excited because the company was spending money in the community – housing employees at the hotel; employees eating three meals a day at the Big lake Lodge; and the company buying fuel and security services locally.	Comment noted. See Chapter Seven "Fiscal Effects on Municipalities and Communities.".	
Jack and Marilyn Crockett, Anchorage, 6	6/29/98	
Supports Cook Inlet Areawide lease sale. The state must continue to offer for lease acreage if we are to sustain an oil and gas presence in Cook Inlet and continue to enjoy natural gas rates well below the national average.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
The oil and gas industry has operated in an environmentally responsible fashion over its 40 year history. Proof of this is evident when one considers the ever increasing sport and commercial salmon harvest and the tremendous increase in tourism visitors.	Comment noted. See response to Issue 10 and Chapter Four "Current and Projected Uses."	
Van Crowell, Soldotna, 6/25/98		
Supports Cook Inlet Areawide lease sale. Oil companies make good neighbors and provide a tax base for the Kenai Peninsula. Areawide leasing will allow big oil to make plans. If they make money, we will have jobs in the future for all children.	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects on Municipalities and Communities.".	
Terry L. Cummings, Anchorage, 6/29/98		
Opposed to Cook Inlet Areawide lease sale. The sale is not necessary.	Comment noted. See response to Issue 1 in Section A "Common Issues."	
Delete sensitive areas, wetlands, wildlife refuges, fishing and recreational areas, and private property.	Comment noted. See response to Issues 3 and 4 in Section A "Common Issues."	

An impact study should be made and there should be no discharge into Cook Inlet.

Comment noted. See response to Issue 9 in Section A "Common Issues." ADNR is not required to produce an EIS. The intent language for SB 308 Section 1 (7) states that an analysis comparable to those generally required by the National Environmental Policy Act of 1969, for the preparation of an environmental impact statement is not required by the state for support of best interest findings issued under AS 38.05 or conclusive coastal zone consistency determinations issued under AS 46.40. However, DO&G has followed the statutory requirements specific for an oil and gas best interest finding. After weighing the facts, including the reasonably foreseeable impacts, the sale was found to be in the state's best interests

There should be ½-mile at a minimum setback from floodplains of rivers and streams.

Comment noted. See response to Issue 5 in Section A "Common Issues."

Alternative energy sources should be developed.

Comment noted. See response to Issue 2 in Section A "Common Issues."

Drilling is ugly and horribly harmful to the environment, which is disappearing at an alarming rate.

Drilling isn't necessarily harmful to the environment. A few years ago, ARCO drilled a test well in a residential area near Big Lake. Residents expressed concerns similar to this. Neighborhood meetings were held to address concerns, and the well was drilled without incident. Other than increased activity over the short-term, no problems were encountered, and no harm was caused to the environment.

As a balancing agency, DO&G believes that multiple use can occur on state lands and that oil and gas can coexist with other uses. Mitigation measures are designed to protect environmental quality. Additional restrictions may be imposed at the plan of operations stage of exploration and development.

Chlorinne Cunningham, Kenai, 6/9/98		
Supports Cook Inlet Areawide lease sale. Lease sale provides needed jobs, revenues, and inexpensive electricity. Industry's safety record continues to improve. We have also organized and funded CISPRI—one of the world's best response teams.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Lee Daigle, Soldotna, 4/29/98		
Supports Cook Inlet Areawide lease sale. The economy of the Peninsula is highly dependent on the successful future of Cook Inlet processors.	Comment noted. See response to Issue 10 in Section A "Common Issues." See also fiscal effects section, Chapter Seven.	
Lisa Deckert, 6/29/98		
Supports Cook Inlet Areawide lease sale. Alaska needs all the income possible, especially as oil prices remain low for the time being.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Steve Deckert, Anchorage, 6/25/98		
Supports Cook Inlet Areawide lease sale. New oil and gas production is critical to the economic health of the area. Past and present Cook Inlet production has supplied jobs, revenue for the community, and an inexpensive source of local energy, all with minimal environmental impact.	Comment noted. See response to Issue 10 and Chapter Seven, "Fiscal Effects on Municipalities and Communities."	
Robert J. Dickson, Anchorage, 5/1/98		
Supports Cook Inlet Areawide lease sale. The oil and gas producers have demonstrated their ability to explore for and extract hydrocarbons in a way that does not adversely affect the environment.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
John Donohue, 6/26/98		
Supports Cook Inlet Areawide lease sale. Specific benefits from Cook Inlet oil and gas include fuels for our cars, trucks, boats and planes come from Cook Inlet oil refined on the Kenai. The natural gas powers businesses, homes, and factories. Cook Inlet provides direct employment for thousands in oil and gas, refining, pipelines, electrical generation, fertilizer manufacturing, jet fuel, and more.	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects on Municipalities and Communities."	

Regan Drake, Anchorage, 6/25/98		
Supports Cook Inlet Areawide lease sale.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Joseph Dukowitz, Nikiski, 6/29/98		
Supports Cook Inlet Areawide lease sale. Cook Inlet gas is the sole source of gas providing heat and electricity to homes and businesses in Anchorage.	Comment noted. See response to Issues 1 and 10 in Section A "Common Issues."	
Rick Dukowitz, Kenai, 6/29/98		
Supports Cook Inlet Areawide lease sale. Oil and gas production supports many jobs and helps pay property tax. The industry has a clean environmental track record.  Development can continue in a clean and safe manner.	Comment noted. See response to Issue 10 and Chapter Seven, "Fiscal Effects on Municipalities and Communities."	
Robert Dukowitz, Nikiski, 6/29/98		
Supports Cook Inlet Areawide lease sale. Oil and gas provides 80 percent of the state's unrestricted revenue and helps pay for education, public safety, roads, airports, and hundreds of other public needs throughout Alaska. Development can continue in a clean and safe manner.	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."	
Rodney Dukowitz, Nikiski, 6/29/98		
Supports Cook Inlet Areawide lease sale. Without oil and gas production, myself and many other Alaskans would be out of a job. Continued leasing assures that we will have jobs and a healthy economic future for our children. During my time spent outdoors, I have not experienced any adverse reaction from oil and gas development.	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."	
Harry Eaton, Nikiski, 6/25/98		
Supports Cook Inlet Areawide lease sale. The environmental risk is acceptable. Assist in allowing all leased lands to quickly gain permits for exploration activities.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Harry A. Eaton, 4/6/98		
Supports Cook Inlet Areawide lease sale. This sale will bring about local economic impact and improve the state economy. At a time of	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."	

decreasing oil revenues, this is a must do for our state. Innovation and change has made this State a leader in this industry.	
Dave Edgell III, Soldotna, 6/29/98	
Supports Cook Inlet Areawide lease sale. Oil production has dropped from a high of about 225,000 barrels per day to about 40,000 barrels per day. Natural gas has dropped from a peak of 300 billion cubic feet per year to about 25 billion. Technology has reduced the cost of drilling and increased the amount of oil and gas that can be recovered. This progress has also reduced the impact of exploration and development on the environment.	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."
Maxine Edwards-Lantz, Anchorage, 4/21	/98
Opposed to Cook Inlet Areawide lease sale. Delete sensitive areas, including all critical habitat areas, wildlife refuges, wetlands, subsistence areas, recreational areas, and private property.	Comment noted. See response to Issues 3 and 4 in Section A "Common Issues."
Require ½ mile setbacks from the floodplains of rivers and streams.	Comment noted. See response to Issue 5 in Section A "Common Issues."
Ed Ellis, Trapper Creek, 5/10/98	
Supports Cook Inlet Areawide lease sale and the Exploration Licensing Only region.	Comment noted. See response to Issue 10 in Section A "Common Issues." The "exploration-licensing only" area is no longer part of this finding. Any licensing in this area will require a separate finding.
Chris Endsley, Soldotna, 6/9/98	
Supports Cook Inlet Areawide lease sale. Oil and gas production helps pay property tax and supports thousands of jobs. Continued development is critical for Southcentral Alaska, which relies on the Cook Inlet for heat and power. Industry has proven it can operate in a clean, healthy, and safe manner.	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."
Mark Flagg, Anchorage, 5/4/98	
Supports Cook Inlet Areawide lease sale. The residential gas prices for natural gas in Anchorage and the surrounding area are 40 percent below the national average. One reason	Comment noted. See response to Issue 10 in Section A "Common Issues."

for this is cheap, clean burning natural gas from Cook Inlet.  The oil and gas production and manufacturing employment for the Kenai Peninsula is 1,450 people. This employment generates an annual payroll of \$97 million.	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."
Tom Gallagher, Anchorage, 5/1/98	
Supports Cook Inlet Areawide lease sale. We are all fortunate to have oil and gas development and its benefits while still being able to enjoy hunting and fishing in wilderness areas on the Kenai Peninsula. It's not an "either-or" situation.	Comment noted. See response to Issue 10. The history of the Cook Inlet area over the last forty years has shown that fishing, timber, tourism, recreation, subsistence, and mining, including oil and gas, can coexist and support one another. The challenge is to balance these competing uses and to assure that development is done with minimum impact to the environment.
Monica D. Gere, Anchorage, 6/8/98	
Supports Cook Inlet Areawide lease sale.	Comment noted. See response to Issue 10 in Section A "Common Issues."
Scott L. Gere, Anchorage, 5/28/98	
Supports Cook Inlet Areawide lease sale.	Comment noted. See response to Issue 10 in Section A "Common Issues."
Jim Gilbert, Wasilla, 4/29/98	
Supports Cook Inlet Areawide lease sale. Allowing Alaska to become more of a competitor in the global energy market will create the economic incentive that development companies require to fund projects.	Comment noted. See response to Issue 10 in Section A "Common Issues."
Patty Ginsburg, Anchorage, 5/26/98	
Supports Cook Inlet Areawide lease sale. Supports environmental protections, but regulatory procedures can and should be streamlined to encourage exploration and development.	Comment noted. See response to Issue 10 in Section A "Common Issues." Mitigation measures are designed to achieve a balance between oil and gas development and environmental protection.
Louis P. Gire, Anchorage, 5/26/98	
Supports Cook Inlet Areawide lease sale. The oil and gas industry made over \$16 million in capital investments throughout Alaska FY96.	Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."

### Evelyn M. Goebel, Anchorage, 6/25/98

Supports Cook Inlet Areawide lease sale. Interested in seeing Alaska's natural resources managed safely and appropriately. Continued leasing, exploration and development are vital to maintaining a healthy economy and future for Alaska and its residents.

Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."

### Bill Grames, Anchorage, 6/25/98

Supports Cook Inlet Areawide lease sale. Anchorage resident recognizes the need for Southcentral Alaska to secure energy resources into the future. Comment noted. See response to Issue 10 in Section A "Common Issues."

# Leigh A. Gray, Anchorage, 5/26/98

Supports Cook Inlet Areawide lease sale. Oil and gas development has brought benefits to Alaskans from jobs and economic security to benefits that have enhanced the quality of life such as community centers, pioneer homes, and schools in all Alaskan communities. Natural gas from Cook Inlet provides energy to heat homes from Homer to Talkeetna. All oil from Cook Inlet is refined in Nikiski for use in Alaska, promoting growth in one of Alaska's few "value-added" industries.

Comment noted. See response to Issue 10 and Chapter Seven "Fiscal Effects."

### Frank and Georgia Griffin, Soldotna, 4/27/98

Opposed to Cook Inlet Areawide lease sale. Require zero discharge at all phases of the petroleum industry. Comment noted. See response to Issue 9 in Section A "Common Issues."

Strongly enforce setbacks and restrictions from streams and critical wetlands and tidelands that can be affected by drilling and support industry operations. Mitigation Measures 6 and 7 regulate stream setbacks and wetlands and are enforced to the satisfaction of ADF&G, which reviews all proposed operations. Comment noted. Restrictions on operations beyond those in existing law are presented in Chapter Nine

Before holding this sale, all factors should be presented to the public for comment. State government and its offices and officers should be advocates for Alaska and its people rather than for industry special interests.

For a discussion of public involvement in the development of this sale, see Chapter One. The director has determined that this sale, as configured with mitigation measures and lessee advisories to protect values, is in the best interests of the state of Alaska and its people. Known factors are represented by the two volume Preliminary Best Interest Finding,

which were available for public comment.

### Beverly Greenhow, New York NY, 5/16/98

Opposed to Cook Inlet Areawide lease sale. Delete all critical habitat areas, wildlife refuges, high value wetlands, private property, and subsistence areas. Comment noted. See response to Issues 3 and 4 in Section A "Common Issues."

A cumulative impact analysis must take place that considers the effects of past and existing development and the reasonably foreseeable effects of this sale, using all available data and traditional knowledge.

Effects of past and existing development, and the reasonably foreseeable effects of the sale are discussed in Chapters Five, Six, and Seven. Traditional knowledge is incorporated into lease documents when available. See response to Issue 8 in Section A "Common Issues."

Cook Inlet operators currently discharge 2 billion gallons of produced water (containing oil and grease) and 3.3 million gallons of drilling muds (clays and chemical mixtures). Cook Inlet is the only coastal area in the US where this is permitted. Require zero discharge in Cook Inlet.

See response to Issue 9 in Section A "Common Issues."

Major river setbacks of ½ mile and salmon stream setbacks of 500 ft. are inadequate habitat protection measures in the event of a flood. Require ½ mile setbacks from the floodplains of rivers and streams.

See response to Issue 5 in Section A "Common Issues." ADNR believes mitigation measures as worded for this sale ensure that resource values will be protected. These measures have been developed over decades of lease offerings in Alaska by state and federal resource agencies.

#### Laura L. Hammond, Nikiski, 6/29/98

Supports Cook Inlet Areawide lease sale. I enjoy the beauty of Cook Inlet with the platforms in place and find it inspiring to view the beauty of nature as the backdrop for the enterprise of man. I would like to watch a drilling operation even if it were right next door to my house. Supports both onshore and offshore leasing.

Comment noted, See response to Issue 10 in Section A "Common Issues."

### Kathleen G. Heckel, Anchorage, 6/3/98

Supports Cook Inlet Areawide lease sale. Areawide leasing puts all the studies, evaluations, and Best-Interest Findings together for an area, thereby simplifying the process and saving the state time and money. Comment noted. See response to Issue 10 in Section A "Common Issues."

Today's technology has improved the oil and gas industry's ability to find and extract gas, thereby increasing the area's petroleum potential.

Comment noted. Development phases and the history of drilling and discover are discussed in Chapter Six.

Technology has allowed companies to locate wells and facilities away from populated areas. When they do have to locate facilities in communities, they work closely with the community and citizens and take measures to prevent being an eyesore or nuisance.

Comment noted. A few years ago, ARCO drilled a test well in a residential area near Big Lake. Residents expressed concerns similar to those being raised here. ARCO took steps to keep the public as informed as possible. Neighborhood meetings were held to address concerns, including those that could be considered nuisance factors, and the well was drilled without incident. Other than increased activity over the short-term, most residents were unaware of any extraordinary noise and no problems were encountered. Also, another company conducted a significant seismic survey on the Kenai Peninsula. It involved approximately 26 square miles and the cooperation of 2,000 landowners. The program was completed successfully.

The division has found industry willing to accommodate reasonable requests and take extraordinary steps to see that local concerns are met promptly and fairly.

Oil and gas operations in Cook Inlet have not adversely affected the salmon harvest, in fact harvests have tripled since the 1950s. The Trans-Alaska oil pipeline has not adversely affected caribou as herds have increased since the pipeline was built.

Comment noted.

### Reade Hensley, Kenai, 5/4/98

Supports Cook Inlet Areawide lease sale.

Comment noted. See response to Issue s 1 and 10 in Section A "Common Issues."

Lorraine Hebert, Anchorage, 5/26/98		
Supports Cook Inlet Areawide lease sale. Availability and price of Cook Inlet gas have kept electrical prices below the national average. This sale will help that continue.	Comment noted. See response to Issues 1 and 10.	
Doug D. Herford, 6/25/98		
Supports Cook Inlet Areawide lease sale. This sale is vital to the state economy as well as the economies of Anchorage and the Kenai Peninsula.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Stu Hirsh, Anchorage, 6/25/98		
Supports Cook Inlet Areawide lease sale. Areawide leasing represents a new way of making acreage available which is certain, comprehensive and more efficient. It gives industry an opportunity to assemble and test prospect concepts over a shorter time period than under the previous sale process.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
This is anticipated to spur exploration and development, promote economic growth, and have a positive impact on state finances.	Comment noted. Fiscal effects are discussed in Chapter Seven.	
The proposed mitigation measures are designed to protect environmental and cultural values while allowing exploration and development to proceed at a reasonable pace.	Comment noted. As a balancing agency, DO&G believes that responsible exploration and development can take place with minimum impact to the environment.	
Kathryn Hollstein, Anchorage, 6/24/98		
Supports Cook Inlet Areawide lease sale. New discoveries are essential to supplement North Slope oil and gas production. The jobs it will create are vital to the Alaskan economy.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
John Horstkoetter, Anchorage, 6/25/98		
Supports Cook Inlet Areawide lease sale. Keeping this sale on schedule is important to many Alaskans and the State of Alaska.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Brent Hughes, Anchorage, 5/10/98		
Opposed to Cook Inlet Areawide lease sale. Delete all critical habitat areas, wildlife refuges, high value wetlands, subsistence areas, recreational areas, commercial areas, and	Comment noted. See response to Issues 3 and 4 in Section A "Common Issues." Effects on subsistence, recreation, municipalities and communities, and other important uses of the	

private property.	sale area are discussed in Chapters Five, Six, and Seven.
The cumulative effects analysis should consider the effects of past disastrous and existing development using all available data and traditional knowledge.	Comment noted. ADNR believes mitigation measures as worded for this sale ensure that resource values will be protected. These measures have been developed over decades of lease offerings in Alaska by state and federal resource agencies. Traditional knowledge is incorporated into lease sale documents when available. See response to Issue 8 in Section A "Common Issues."
Require zero discharge into Cook Inlet.	Comment noted. See response to Issue 9 in Section A "Common Issues."
Require ½-mile setbacks from floodplains of rivers.	Comment noted. See response to Issue 5 in Section A "Common Issues."
Lyndon C. Ibele, Anchorage, 6/18/98	
Supports Cook Inlet Areawide lease sale. The abundance of low cost gas has been the economic engine that has driven the growth of industry, business, and full-time employment in the Cook Inlet area. I support the lease sale as proposed with no additional restrictions or modifications.	Comment noted. See response to Issue 10 in Section A "Common Issues." Some changes to mitigation measures and lessee advisories have been made since the preliminary best interest finding. See Chapter Nine.
Jake Ivanoff, Kenai, 5/6/98	
Supports Cook Inlet Areawide lease sale.	Comment noted. See response to Issue 10 in Section A "Common Issues."
Dennis Johnson, Soldotna, 6/26/98	
Supports Cook Inlet Areawide lease sale. This lease sale is important for the economic growth and for the future of our children.	Comment noted. See response to Issue 10 in Section A "Common Issues."
Cook Inlet oil and gas production contributes about \$250 million every year through investments, salaries, taxes and royalties. Exploration and development is needed to keep these revenues flowing.	Comment noted. Fiscal effects of this sale are discussed in Chapter Seven.
Donald M. Johnson, Anchorage, 5/29/98	
Supports Cook Inlet Areawide lease sale.	Comment noted.

Lana Johnson, Anchorage, 5/26/98		
Supports Cook Inlet Areawide lease sale. Inlet gas has kept our gasoline rates competitive.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Richard Blake Johnson, Kenai, 6/22/98		
Supports Cook Inlet Areawide lease sale.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Michael R. Juliussen, Kenai, 5/8/98		
Supports Cook Inlet Areawide lease sale.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Nicholas Kategianes III, Soldotna, 6/29/98		
Supports Cook Inlet Areawide lease sale. More than 80 percent of oil company workers are Alaska residents. The industry strongly supports training programs so that Alaska has enough qualified workers to meet the demands of the industry.	Comment noted. See response to Issue 10 in Section A "Common Issues."	
Nancy Knuutila, Anchorage, 4/30/98		
Supports Cook Inlet Areawide lease sale. Without lease sales, the oil companies will have to leave.	Comment noted. If no more lease sales were held, companies would not have to leave. Companies that have existing producing leases would remain until those leases expire. However, companies looking to explore for new reserves or to acquire existing leased acreage would not come to Alaska because no new acreage would be made available and expired lease acreage would not be reoffered.	
Do the anti-oil and gas promoters have any viable alternatives to generate funds to continue services, facility funding and operation, educational opportunities, and an healthy state infrastructure currently subsidized by oil and gas royalty revenues?	There are no alternatives to leasing that can generate the same revenues and benefits that oil and gas extraction provides the state. See response to Issue 2 in Section A "Common Issues."	
Many employment opportunities and agencies are contingent upon the price of oil/barrel to determine their employment of organizational status. A state tax will not solve the problem; our state population cannot generate that kind of revenue.	Alaska is dependent on petroleum revenues to provide services to residents, and the volume of these revenues depends in part on the price of oil.	

#### Jack Koestline, 6/25/98

Supports Cook Inlet Areawide lease sale. The U.S. now imports over 57 percent of its oil from highly unstable foreign sources. America needs an American oil industry.

Comment noted. In 1997, approximately 20 percent of U.S. oil production (6.5 million barrels/day) came from Alaska. In the same year, the U.S. imported an average of 8.2 million barrels of crude oil/day. See response to Issue 10 in Section A "Common Issues."

### James W. Konst, Kenai, 6/19/98

Supports Cook Inlet Areawide lease sale. Benefits to the citizens of Kenai and Alaskans include inexpensive electricity and natural gas service, property tax support, royalty payments, and good paying jobs. Industry can continue to develop Cook Inlet oil and gas in clean, healthy, and safe manner. The industry-funded oil spill response program in the Inlet is one of the best in the world.

Comment noted. See response to Issue 10. ADNR is satisfied with the efforts directed toward oil spill prevention and response in Cook Inlet. Improvements continue to be made in planning and technology. State and federal agencies, industry, and concerned citizens groups are working together to prepare geographic response plans, which will describe site-specific response strategies for the Inlet. See Chapter Five for additional oil spill discussion information.

### Paul Laird, Eagle River, 6/25/98

Supports Cook Inlet Areawide lease sale. Oil and gas development/production has been the cornerstone of the Kenai Peninsula and Alaska economy for nearly four decades. Areawide leasing will help ensure continued job and business opportunities for those in the area for years to come – while taking all the steps necessary to minimize or avoid environmental impacts.

Comment noted. See response to Issue 10 in Section A "Common Issues."

#### Karen Lauder, 6/25/98

Supports Cook Inlet Areawide lease sale. The North Slope lease sale yesterday is proof that areawide leasing provides the incentive for oil companies to view Alaska as a going concern. Comment noted. See response to Issue 10 in Section A "Common Issues."

### John H. Lettow III, Wasilla, 6/29/98

Require state of Alaska and Mat-Su Borough lands to be used for surface access and activity in all exploration and production actions.

Only allow residential property use where consensus exists among homeowners/property owners.

Exempt from any production or exploration activity all of the "Knik-Fairview Comprehensive Plan" area. Oil and gas leasing and development companies did not participate in that 2.5-year process of that "plan" development, approval, and implementation. That "plan" identifies and lays out prospective industrial site lands which are limited in uses and does not include oil and gas exploration, production, and drilling.

Require in all plans of exploration or development a provision for centralization of support industry contractors and their "home or remote site-based" activities. Surface entry locations are determined at the project stage, after plans of operation have been approved, landowners contacted, field surveys conducted, and permits obtained. Use of private lands for surface access may be environmentally and socially preferable to exclusive use of state and borough lands. Such a requirement may make some subsurface lands undevelopable and has the potential to devalue the mineral estate, which belongs to all the people of Alaska. Such a restriction would not be prudent at the lease sale phase and it This restriction would not be in the state's best interests.

Comment noted. The division has found industry willing to accommodate reasonable requests and take extraordinary steps to see that local concerns are met promptly and fairly. In turn, once area residents understand what and how a proposed operation is to be done, consensus is generally reached. The issue of private property rights was considered during the Stakeholder's process for the Cook Inlet Areawide lease sale and resulted in a policy on private property entry. See response to Issue 4 in Section A "Common Issues."

ADNR has reviewed the Knik-Fairview Comprehensive Plan. Oil and gas activity is not prohibited by the plan. Local governments, community councils, and the public are provided the opportunity to review proposed plans of operation at the time specific activities are proposed. Further, Mitigation Measure 28 requires that plans of operation must describe the lessee's efforts to communicate with local communities and interested local groups.

The state cannot require a company to do business with another company. However, Alaska Coastal Management Program standards require that energy facilities be consolidated, that concurrent use of facilities for public or economic reasons be considered, and that agencies approving projects cooperate with landowners, developers, and federal agencies in the development of facilities (6 AAC 80.70(b).

Oil and gas activities have typically created "environmental legacies" from non-compliance on waste management, underground injection control, etc. Require an environmental remediation fund to be put in place by unit owner/operators to provide for support industry "non-compliances" and pollution remediation.

Existing soil and groundwater contamination of the sale area and waste disposal practices are discussed in Chapter Five. Creation of such a fund would require changes to oil and gas statutes, and is therefore beyond the scope of this best interest finding. AOGCC oversees underground injection, ADEC oversees waste disposal, and compliance issues should be directed to these agencies.

Require the unit owner/operator to prepare and provide a contingency at their cost to protect and provide potable water distribution systems where groundwater pollution occurs from oil and gas exploration and production activities.

By federal and state law all each operator of oil facilities must have an approved oil discharge prevention and contingency plan (c-plan) before they are allowed to operate. The contents of these plans are stipulated by regulations administered by ADEC and the federal government. The plans must include a response action plan, prevention plan, and supplemental information for background and verification. Please see the oil spill discussion in Chapter Five for further details regarding the contingency plans and regulation of oil spill planning and prevention. The c-plan requirement is a means to protect the environment, which includes groundwater, from oil discharges. Operators prepare c-plans at their cost, and several agencies (ADNR included) and public interest groups, such as the Cook Inlet Regional Citizens Advisory Council, review the plans when they are first submitted and at each subsequent three-year renewal or when a significant change in the operation or c-plan is proposed. The plans are also exercised regularly, and these drills are monitored by state and federal agencies.

Exempt all private and public park lands from exploration and production activities in regard to surface facilities location.

Comment noted. Park lands are not included in the sale. See response to Issue 4 in Section A "Common Issues."

Exempt from surface oil and gas exploration and production activities a buffer zone of  $\geq \frac{1}{4}$  mile from all watercourses and lakes.

Comment noted. See response to Issue 5 in Section A "Common Issues."

Exempt all surface exploration and production facility sites that do not provide an "engineered solution" for ultimate and adequate secondary/tertiary containment for potential surface discharges of pollutants where drainage gradients would naturally allow pollution events to reach water courses or waterbodies.  Supports Cook Inlet Areawide lease sale.  Interested in seeing the continuation of the oil and gas industry in Alaska.  Accidental discharge prevention and response is discussed in Chapter Five. Under mitigation measure 9, impermeable lining and diking, or equivalent measures such as double-walled tanks, will be required for onshore oil storage facilities. Additional site-specific measures may be required as determined by ADNR, with the concurrence of ADEC, and will be addressed in the existing review of project permits or oil spill contingency plans (C-Plans). Buffer zones of not less than 500 feet will be required to separate onshore oil storage facilities and sewage ponds from marine waters and freshwater supplies, streams and lakes, and key wetlands. Under mitigation measure 11, pipelines must be located upslope of roadways and construction pads and must be designed to facilitate the containment and cleanup of spilled hydrocarbons. Pipelines, flowlines, and gathering lines must be designed and constructed to assure integrity against climatic conditions, tides and currents, and other geophysical hazards.  Dore Liston, Eagle River, 6/25/98  Supports Cook Inlet Areawide lease sale.  Interested in seeing the continuation of the oil and gas industry in Alaska.  Kim Low, Anchorage, 5/26/98  Supports Cook Inlet Areawide lease sale.  Comment noted. See response to Issue 10 in Section A "Common Issues."	Require storm-water pollution prevention plans for all surface exploration and production facilities.	Storm water is a significant source of surface water pollution. ADEC reviews construction plans and approves certain pollution prevention plans for federal permits (construction and multi-sector) and certain other storm water controls and treatment systems as a means to control storm water pollution. 18 AAC 72.600 requires plan reviews for all non-domestic waste treatment and discharges systems. NPDES storm water information and permits are available from EPA or ADEC's Division of Air and Water Quality, Water Quality Permitting Section. Spill prevention plan requirements are discussed in Chapter Five.	
Supports Cook Inlet Areawide lease sale. Interested in seeing the continuation of the oil and gas industry in Alaska.  Kim Low, Anchorage, 5/26/98  Supports Cook Inlet Areawide lease sale.  Comment noted. See response to Issue 10 in Section A "Common Issues."  Comment noted. See response to Issue 10 in Supports Cook Inlet Areawide lease sale.	facility sites that do not provide an "engineered solution" for ultimate and adequate secondary/tertiary containment for potential surface discharges of pollutants where drainage gradients would naturally allow pollution	is discussed in Chapter Five. Under mitigation measure 9, impermeable lining and diking, or equivalent measures such as double-walled tanks, will be required for onshore oil storage facilities. Additional site-specific measures may be required as determined by ADNR, with the concurrence of ADEC, and will be addressed in the existing review of project permits or oil spill contingency plans (C-Plans). Buffer zones of not less than 500 feet will be required to separate onshore oil storage facilities and sewage ponds from marine waters and freshwater supplies, streams and lakes, and key wetlands. Under mitigation measure 11, pipelines must be located upslope of roadways and construction pads and must be designed to facilitate the containment and cleanup of spilled hydrocarbons. Pipelines, flowlines, and gathering lines must be designed and constructed to assure integrity against climatic conditions, tides and currents, and other	
Interested in seeing the continuation of the oil and gas industry in Alaska.  Kim Low, Anchorage, 5/26/98  Supports Cook Inlet Areawide lease sale.  Comment noted. See response to Issue 10 in	Dore Liston, Eagle River, 6/25/98		
Supports Cook Inlet Areawide lease sale.  Comment noted. See response to Issue 10 in	Interested in seeing the continuation of the oil		
	Kim Low, Anchorage, 5/26/98		
	Supports Cook Inlet Areawide lease sale.		

#### Mark Lusch, Wasilla, 6/8/98 Opposed to Cook Inlet Areawide lease sale. Comment noted. Reducing oil consumption is Instead of trying to find more oil that can be beyond the scope of this lease sale decision. converted into CO<sub>2</sub>, we should be spending See response to Issue 2 in Section A "Common time and public money looking for ways to Issues." reduce oil consumption. We let the multi-national oil corporations Comment noted. control our government and take our resources at a discount price. I oppose the Cook Inlet Areawide Lease Sale giveaway. (Like my opposition is going to make any difference. Sorry I don't have some cash for you.) Christine Lutsch 6/25/98 Comment noted. I am an Alaska resident and I do not support the Cook Inlet Area Wide Sale David Manzer, 4/28/98 Supports Cook Inlet Areawide lease sale. Comment noted. See response to Issue 10 in Areawide leasing alleviates duplicative and Section A "Common Issues." unnecessary reviews, paperwork and costs to both the public and private sector. The plethora of environmental laws and Comment noted. In addition to state and federal protections in place under separate and regulations, DO&G with assistance from other overlapping authorities will provide for not just agencies has crafted mitigation measures and lessee advisories to ensure resource values are adequate but exceptional environmental protection. protected. Additional measures may be added at the Plan of Operations stage. Arguments opposing Areawide leasing fail to Comment noted. Governmental powers to mention federal and state laws that must be regulate oil and gas activities are presented in Chapter Eight. Mitigation measures are complied with prior to drilling of even one well should a lease actually prove prospective. presented in Chapter Nine. A list of some laws and regulations pertaining to oil and gas

exploration, development, production, and transportation are presented in Appendix B.

#### Richard and Jane Marshall, Kenai, 6/10/98

Chose home on the bluff at Kenai because of the view of the Inlet and the Alaska Range. We, of course, are not alone in placing a very high value on this view as any assessment of the real estate classified advertisements will attest. We rejected properties north of Kenai because the view had been destroyed by the presence of oil platforms and because of the clutter and noise of the infrastructure that supports the oil and gas industry.

For a discussion on mitigating impacts to viewsheds, see Chapter Five.

Opposed to development that would impact the quality of life south of the town of Kenai. Overall quality of life is frequently left out of the decision making process. Please do not let that happen in this case.

Municipalities and communities may experience both positive and negative effects from this sale. Under mitigation measure 6, lessees must minimize sight and sound impacts for new facilities sited less than one-half mile from riverbanks and in areas of high recreational use. Additionally, mitigation measure 28 requires lessees to describe efforts to communicate with local communities, and interested local community groups, if any, in the development of Plans of Development prior to their approval. Any proposal for a major energy facility, like a platform, must be found consistent with the ACMP and local district plans. A public comment period is included in ACMP reviews.

### David Mathews, Homer, 5/19/98

Supports Cook Inlet Areawide lease sale. Oil and gas development is compatible with fishing and tourism.

Comment noted. Effects on fishing and tourism are discussed in Chapter Five.

### Thomas E. Maunder, Anchorage, 6/26/98

Supports Cook Inlet Areawide lease sale. Previous leasing practices confined industry interest to limited areas in a region. The areawide concept allows prospective bidders to build off previous information without an arbitrary limit on the land area one might consider. With more land leased, the number of possible projects increases allowing industry groups to share the equipment and infrastructure necessary to explore the leases.

Comment noted. See response to Issue 10 in Section A "Common Issues."

#### Ray W. McCubbins Jr., Kenai, 5/7/98 Supports Cook Inlet Areawide lease sale. Comment noted. See response to Issue 10 in Growth in oil and gas technology has allowed Section A "Common Issues." research and recovery to continue with much less impact on the environment than ever before. These past years have shown little to no impact on the environment. The future looks even more promising. Steve McCutcheon, Anchorage, 4/29/98 Supports Cook Inlet Areawide lease sale. Comment noted. Cumulative effects of Science has shown that the platforms have not platform discharges on Cook Inlet waters are harmed the fishery. Onshore operations seem discussed in Chapter Five. Effects of the sale to not have affected wildlife materially. on fish and wildlife of the sale area are discussed in Chapter Six. It would be most practical for the state to adopt ADNR believes laws and regulations pertaining the broadest and most liberal regulations to to oil and gas activities are appropriate and enhance further exploration and production of provide adequate protection of both oil and gas in the Cook Inlet and adjacent environmental and social values. areas. Lela McGee, Kenai, 6/10/98 Supports Cook Inlet Areawide lease sale. Oil Comment noted. See response to Issue 10 in and gas production has played an important Section A "Common Issues." The history of role in the lives of local families. Cook Inlet the Cook Inlet area over the last forty years has remains as beautiful and clean as it was before shown that fishing, timber, tourism, recreation, subsistence, and mining, including oil and gas, that first well was drilled, thus having no can coexist and support one another. The negative impact on tourism. Southcentral Alaska relies on the Cook Inlet to supply heat challenge is to balance these competing uses and power at reasonable rates. Giant strides and to assure that development is done with have been made in reducing environmental minimum impact to the environment. impact and improving safety records. Joseph McKee, Kenai, 6/8/98 Supports Cook Inlet Areawide lease sale. Oil Comment noted. See response to Issue 10 in and gas production provides jobs and lower Section A "Common Issues." utility costs. Technology can result in little if any impact to the environment. Michael L. McKinney, Anchorage, 5/1/98 Opposed to Cook Inlet Areawide lease sale. Comment noted. See response to Issues 1 and This sale is not needed at this time due to low 10 in Section A "Common Issues." oil prices in addition to the following: If an oil spill occurs, the commercial fishing, Employment and earnings by sector are sport fishing, and tourism industries would be presented in Chapter Four. The platforms,

endangered. These three industries account for more jobs and more money for the Alaskan economy than the oil industry in the Cook Inlet area. With the oil rigs in Cook Inlet, it's just a matter of time before something bad happens. pipelines, and tanker vessels have been operating for 30-years in the Cook Inlet with one major incident (*Glacier Bay* spill), and no long term impacts. It is not likely that the areawide sale will have any more impact than existing operations. Oil spill prevention and response are discussed in Chapter Five.

These three industries are renewable while oil is not. We can't go and plant 55 gallon oil drums and have new oilfields grow up out of them.

Comment noted.

The tourist, sport fishing, and commercial fishing industries bring enough people to Alaska, and we don't need more people here in Alaska.

Increases in population growth as a result of this sale are not reasonably foreseeable because several variables affect the size and composition of Alaska's population.

Another reason not to have an oil lease sale is the plan to expand the Port of Anchorage. How will the Totem ships get through Cook Inlet without having to make detours or "bumping" into an oilrig? Has anyone given consideration to ship traffic? A ship coming to dock in the Port of Anchorage has to wait until high tide just to dock. The U.S. Coast Guard manages vessel traffic in the inlet. They prescribe navigational routes through the Inlet and procedures that ensure the safe transit of all vessels. Lease facilities and operations may not block access to navigable and public waters as defined by AS 38.05.965 (13) and (17).

The pipes needed to transport the oil will have to be built and as with the Trans-Alaska Pipeline we will be taking more chances on oil spills, disrupting animal migrations, and destroying more habitat by taking more land. Transportation is discussed in Chapter Five. Under mitigation measure 11, wherever possible, onshore pipelines must utilize existing transportation corridors and be buried where soil and geophysical conditions permit. In areas where pipelines must be placed above ground, pipelines must be sited, designed and constructed to allow free movement of moose and caribou.

One earthquake will cause an environmental disaster and we just had two earthquakes this week already. We are not capable of cleaning up the mess an earthquake will cause if the pipes/platforms are destroyed by an earthquake.

Geophysical hazards and oil spill prevention and response are discussed in Chapter Five. ADNR believes spill cleanup capability is adequate and commensurate with the risk of a spill. Pipelines and platforms are constructed to withstand all geophysical hazards.

### Patrick McNamara, Homer, 6/25/98

Opposed to the ten-year lease plan. The sale area is too large.

Of the 4.2 million acres in the border of the sale, only 2-3 percent have not been offered before. The purpose of areawide leasing is to provide an established time each year that the state will offer for lease all available acreage within a geographical area. The result will be a stable, predictable leasing program, which will allow companies to plan and develop their exploration strategies and budgets years in advance.

Offering smaller sales more frequently is less economical and less efficient. In the past, industry would nominate acreage to be included in an oil and gas lease sale only to find that when the sale actually took place two to three years later, their interest and priorities would have shifted to a different area. One of the reasons why the legislature amended AS 38.05.035 and encouraged areawide leasing was to resolve this problem. With areawide leasing, all available acreage will be offered, after public comment, on an annual basis. Additionally, the areawide leasing program increases state government efficiency by allowing comprehensive evaluation of a geographic area versus a piecemeal evaluation. As state budgets decline, this efficiency is demanded by the public and legislature and is a responsible approach by ADNR

Insufficient manpower and state funding benefits a self-monitoring industry.

Comment noted. Alaska has some of the strictest environmental standards in the nation (ex: water quality standards). Governmental powers to regulate the oil and gas industry in Alaska are presented in Chapter Eight.

Opposed to industry tax breaks, subsidies, decreased or zero royalty payments, and weaker environmental standards.

Comment noted. There are no implicit or explicit subsidies associated with this sale. While the division sets the royalty rate for the sale, the Legislature can change it. Mitigation measures and lessee advisories attached to this lease sale represent the most stringent environmental standards to date.

### Marla McPherson, Homer, 4/28/98

Opposed to Cook Inlet Areawide leasing. Oil and gas development is not needed in Cook Inlet to provide jobs and revenue to the State. Economic returns from development is minor compared to the losses to the local environment and communities.

ADNR has determined there is a significant need for this sale. See response to Issue 1 in Section A "Common Issues." The director has determined that benefits of leasing to Alaska outweigh the costs. Development not only generates revenue for the state and local governments, but also provides communities with jobs. Ancillary spending in turn supports other sectors of the state and local economy. Effects on communities are discussed in Chapter Seven. Communities within the sale area are expected to gain, not lose from leasing. Effects on water quality are discussed in Chapter Five. Effects on air, habitats, fish, and wildlife of the sale area are discussed in Chapter Six.

The BIF states that the lease sale could decrease unemployment rates and offset job losses that have occurred in Southcentral Alaska due to declining Cook Inlet oil production. However, this is misleading because the Finding sites a decrease in unemployment rates in the Mat-Su Borough and Kenai Peninsula Borough and sites only a slight increase in unemployment in Anchorage.

It is likely that post-sale activity will assist local employment. Unemployment rates are only somewhat affected by oil and gas leasing, but would have sharper effects if there is local project spending. Other factors include season and market conditions.

No reference is made to any jobs lost in Southcentral Alaska due to declining oil production in Cook Inlet. In fact, the Finding explains that "petroleum exploration activity has increased recently." Jobs have been lost in the Cook Inlet region as a result of scaling back declining field operations. Today there are new smaller players like Anadarko forming partnerships with large companies like Arco. See Chapter Four for a description of the sale area people and economy. See also Chapter Seven for a discussion of fiscal effects and effects on municipalities and communities

Therefore, I am not convinced that unemployment is a problem in Southcentral Alaska.

Unemployment is a problem anywhere it affects a community. Presently, there is low unemployment in Anchorage. In November of 1998, the unemployment rate was 3.6 % in the MOA, 6.1 % for the MSB and 9.7% in the KPB.

Nor am I convinced that there are job losses in the Cook Inlet oil industry that need to be offset by the lease sale.

In fact, the lease sale could increase unemployment rates. According to A Social and Economic Impact Study of Offshore Petroleum and Natural Gas Development in Alaska, during the oil boom in the upper Inlet, unemployment increased even more rapidly on an average basis than did the population ... suggesting that persons were drawn to the region or into the labor force in search of employment in greater numbers than could be employed."

Families may be more likely to stay in these areas if new jobs are available for projects with long-term consequences, like Unocal and Pioneer Unit. The lease sale and annual lease offerings provide employment opportunities necessary for Southcentral Alaska..

This report accurately portrays an influx of industrial workers from outside Alaska to explore and develop the recently discovered fields of the Kenai Peninsula. Many of those people remain here as have their children and grandchildren.

The report also mentioned that workforce and employment totals grew by 30 percent per year between 1961 to 1968, and that population growth also remained steady. The authors note that "[p]resumably, increases in population from 1968 to 1970, despite the declining hydrocarbon-related employment, represented the immigration of more permanent workers and their dependants." (A Social and Economic Impact Study of Offshore Petroleum and Natural Gas Development in Alaska, Phase I Final Report. Submitted to the Department of Interior, Bureau of Land Management by Mathematical Sciences Northwest, Inc. and Human Resources Planning Institute, October 15, 1976, p. 81)

The BIF claims that "an influx of workers from outside Alaska as a result of the proposed sale is unlikely," and that "as existing Cook Inlet fields decline, more and more of the current resident labor pool and service support industry will be in need of employment." However, I see no realistic way for increased oil exploration and production from the proposed lease sale to precisely coincide with declining exploration and production. With the new sale, jobs will be created and secured far before jobs are lost from declining oil fields in Cook Inlet. As a result, most labor created by the lease sale will have to come from outside. In fact, the FEIS for lease sale 149 admits that with the federal proposed lease sale "most initial workers are anticipated to come from outside the region," (FEIS L.S. 149 FV.B. 1-65) and I believe the same to be true for the State areawide lease sale.

Concerned about nonresident employment. A 1998 report by the Alaska Department of Labor sites that in 1996 nearly 21.5% of all private sector workers were nonresident, reporting total earnings of \$902 million, most of which is spent in their home states "depriving Alaska of the full economic benefits."

Job loss from declining fields and job gains from new exploration and production may not coincide in time, however there is a strong incentive to hire local labor and many people, not yet at retirement age are expected to remain in Alaska. The lease sale may result in the creation of new job opportunity. DOG disagrees that most workers would come in from outside the state. The MMS assumption of labor needs is based on a 500 million barrel exploration, development, production, and transportation scenario; a scenario involving remote, offshore development of lower Cook Inlet. Clearly, such a series of events does not reflect the sale acreage being offered.

ADNR is very concerned about unemployment in Alaska. Some jobs are not filled by Alaska residents. Mitigation measure 12, encourages all lessees to employ local and Alaska residents and contractors for work performed on the leased area. Lessees shall submit, as part of the plan of operations, a proposal detailing the means by which the lessee will comply with the measure. The proposal must include a description of the operator's plans for partnering with local communities to recruit and hire local and Alaska residents and contractors. The lessee is encouraged, in formulating this proposal, to coordinate with employment services offered by the state of Alaska and local communities and to recruit employees from local communities.

Although this is the lowest percentage of nonresident workers in the private sector in Alaska since 1990, the report indicates that in the oil and gas industry the total number of resident workers declined while the total number of nonresident workers increased from 20.7% in 1995 to 26.2% in 1996. Furthermore, the report states that nonresident oil and gas workers earned more money on average then resident oil and gas workers. Nonresident workers in the oil and gas industry earned \$173 million in 1996 with a slightly higher average quarterly earning than resident oil and gas workers. Most of this money leaks out of the state with little benefits received to the local regions.

According to the ADOL report, *Nonresidents* Working in Alaska, the largest number and highest percent of nonresident workers in Alaska were found in the seafood processing industry, not oil and gas. Gains have been made in recent years to reduce the number of nonresidents working in oil industry jobs, but these numbers fluctuate. Oilfield service companies improved their resident hire performance between 1995 and 1996, while major oil companies increased their percent nonresident workers in that period. ADOL attributes this increase to recent layoffs and retirement of workers. The report suggests that the percent nonresident workers for major oil companies will drop back to an average of slightly more than 20 percent. While \$173 million was paid to nonresidents in the 1996 oil and gas extraction industry, nearly \$510 million was paid to residents. More than nine percent of oil industry workers that were nonresidents in 1995 became residents in 1996, thus it is not accurate to say most nonresident wage earnings leave the state or don't help the local economy.

In addition, jobs and revenues are lost to the local region because of the high export dependence of the oil industry. Studies of oil and gas extractions in upper Cook Inlet show that a "substantial share," over 2/3 of crude oil produced in the Inlet is exported in unprocessed form, and with this exported oil, local jobs are exported to workers far from Alaska.

In 1996, all of Cook Inlet natural gas was consumed locally. All Cook Inlet oil is processed at the Tesoro refinery, which recently bought the rights for all Cook Inlet oil. The company has historically imported North Slope crude from Valdez to fuel its Nikiski refinery, but recently announced it would send its North Slope crude to be refined in Hawaii for consumption in the pacific. More than a third of Cook Inlet gas is used in the LNG plant which processes the gas into a liquid, which is then sold to Japan.

In addition, the jobs that are created in the oil industry compared to the trickle down jobs that are created in the service industry present a large income gap, which contributes to social inequalities and even crime. The BIF states that average monthly earnings in 1996 from the oil industry is \$7,105, while the average monthly earnings from the retail trade industry is only \$1,500. Not only is there an overwhelming income gap between the industries, oil and gas jobs present an income gap between male and female and white and nonwhites. According to A Social and Economic Impact Study of Offshore Petroleum and Natural Gas Development in Alaska, with the introduction of oil development in the upper Inlet, female income dropped from 45.7% of white male income to 44.6%; and "Native residents were perhaps most excluded from the benefits of local development." According to a paper titled Development and Social Problems: The Impact of Offshore Oil Industry on Suicide and Homicide Rates, this "economic inequality is especially likely to encourage crime."

Post-sale activities may create jobs in all sectors of the economy, from oil and gas extraction to construction, wholesale and retail trade, transportation, utilities, communications, and services. Thus, ADNR does not expect any income disparity to be exasperated by leasing. According to ADOL, the wage and salary employment in the services sector is expected to grow 2.6 percent per year in the next seven years, while mining (includes oil and gas) is expected to grow at a more modest 1.9 percent. Much of the growth in the mining sector is in hard rock mineral extraction.

Shifts in gender earnings ratios or minority participant levels in the labor force are beyond the scope of this finding because they are caused by many factors (not just oil and gas activities), and are unpredictable and not reasonably foreseeable. The 1976 report cited merely compares statistics between 1960 and 1970, but presents no theory of causality other than to say shifts concurred with the production phase of field development in the upper Inlet. This isn't to say that such effects are not possible, but given the size and diversity of Alaska's economy and labor force today compared with what it was in 1960, shifts or changes in such indicators would be far less under a similar field development and production scheme: a scheme highly unlikely given the maturity of the Cook Inlet petroleum basin, the quantity and location of acreage being offered, and the fact that utility and production infrastructure is already in place. Economic inequality may be linked to crime rates, but because such linkages are not reasonably foreseeable, it is beyond the scope of this finding.

The State has not demonstrated any responsibility in planning for or beginning a transition away from its dependence on a nonrenewable resource. Until the State shows some responsibility towards diversifying its revenue source, the citizens cannot support a perpetuation of its oil dependency.

This year, the State Legislature passed a bill providing a 60% oil and gas royalty reduction for 6 Cook Inlet fields, which could result in a \$14 million to \$27 million loss to the general fund and permanent fund. Until Alaska's political leaders demand a fair return from the oil industry, we cannot believe that the proposed oil and gas lease sale will substantially contribute to the State's revenues.

The BIF claims that one of the "long term goals that drive(s) resource development strategies includes providing the means for sustainable economic growth." To continue a growth in oil and gas development would be unsustainable because they are finite resources.

Even the BIF states that the foreseeable fiscal effects from the proposed oil and gas lease sale will be temporary. Until the State shows any move away from its dependence on an unsustainable, nonrenewable, temporary resource, we cannot and should not justify more oil and gas development.

Pursuance of alternative energy sources is a policy matter for the legislature, Governor, and private sector. There is no requirement in land disposal statutes (Title 38) that require ADNR to address renewable energy development prior to or in lieu of mineral leasing. Therefore it is beyond the scope of this finding. See response to Issue 2 in Section A "Common Issues." Lessee advisory 5b recognizes that energy sources other than oil and gas will be needed.

The Administration opposed the royalty reduction bill passed by the legislature in 1998. Nonetheless, despite the actions of Alaska's elected leaders, ADNR believes that over the next ten years, this sale will contribute to the state's revenues and provide benefits to Alaskans. Revenue generation is not the only need for this sale. See response to Issue 1 in Section A "Common Issues."

The use of depletable resources today can benefit future generations because today's oil and gas development will help sustain future generations living under a different extraction profile. This is done with state spending of petroleum taxes, local taxes to support local governments and community development, maintenance of local jobs to raise future Alaskans, and the Permanent Fund. It is generally accepted that natural gas will become a transition fuel as oil reserves are depleted. The state is working toward making a gas line from the North Slope a reality. Meantime, the search for gas reserves in Cook Inlet is ongoing. During a transition period from oil to gas, and eventually other energy sources, mineral leasing will still be essential to sustaining Alaska's people.

Fiscal effects of the sale will have both shortterm and long-term duration. See Chapter Seven. See also response to Issue 1 in Section A "Common Issues." A February 1995 issue of *Alaska Economic Trends* highlights Homer as a significant stable and diverse economy for a community its size in Alaska. We have worked hard to attain and maintain this diversity. Businesses in Homer are, for the most part, small-scale and locally owned. We are not willing to accept an industry that will create a larger social, political and physical infrastructure dependent upon one finite resource.

Comment noted. The economy of Homer is experiencing growth without the presence of the oil and gas industry as evidenced by recent development along the By-Pass. Other factors contribute to this growth, such as new residential settlement and tourism infrastructure. Community planning to control development and preserve the historic character of the community is underway. Reasonably foreseeable effects of post-sale activities on municipalities and communities are discussed in Chapter Seven.

Pursuing more oil and gas development in Cook Inlet could present economic harms because it is contradictory to the long-term economic goals of both the State and the local economies. Since the long-term losses do not balance with the short-term gains, the proposed areawide lease sale does not make any economic sense. Please cancel the proposed Cook Inlet Areawide lease sale

Leasing and resulting oil and gas development in Cook Inlet is consistent with both long-term and short-term goals of the state. The Director has determined that this oil and gas lease sale, as configured with mitigation measures and lessee advisories, is in the best interests of the state. Mitigation measures and lessee advisories, coupled with existing powers to regulate oil and gas activities provide adequate protection of the area's values and uses. See Chapter Eleven.

## Lloyd Mercer, Soldotna, 6/26/98

Supports Cook Inlet Areawide lease sale. New exploration is important to Alaska so that we can continue producing the oil and gas we need to heat and light our homes and businesses and keep its gas tanks full.

Comment noted. See Issue 10 in Section A "Common Issues."

### George Meyer, Anchorage, 5/26/98

Supports Cook Inlet Areawide lease sale. Oil and gas exploration and development is essential to heat Southcentral Alaska homes and businesses and keep gas tanks full.

Comment noted. See Issue 10 in Section A "Common Issues."

Oil production is in decline, and natural gas production has dipped to less than 250 billion cubic feet per year from a peak of more than 300 billion cubic feet per year.

Comment noted. Demand for Cook Inlet gas is increasing at about 1.5 percent/year. New discoveries are needed to replace declining reserves.

Scott Misner, 6/25/98	
Supports Cook Inlet Areawide lease sale. Such a program will enhance the operating companies ability to long term plan operations and extend the life of already declining production.	Comment noted. See Issue 10 in Section A "Common Issues."
Ivan Moore, Anchorage, 5/29/98	
Supports Cook Inlet Areawide lease sale.	Comment noted. See Issue 10 in Section A "Common Issues."
Chris S. Myers, 6/25/98	
Supports Cook Inlet Areawide lease sale. Energy companies need to continue to have the opportunity to bid on State acreage on a regular basis. This will help in long term planning to ensure that inexpensive natural gas is available for the future.	Comment noted. See Issue 10 in Section A "Common Issues." The purpose of areawide leasing is to provide an established time each year that the state will offer for lease all available acreage within a geographical area. The result will be a stable, predictable leasing program, which will allow companies to plan and develop their exploration strategies and budgets years in advance.
Mike Nugent, 6/25/98	
Supports Cook Inlet Areawide Lease sale. Continued development of Cook Inlet reserves is key to the long term viable operation of the Kenai ammonia and urea fertilizer plant, and the economic stability of Kenai Peninsula communities.	Comment noted. See Issue 10 in Section A "Common Issues."
William B. Odom, Wasilla, 6/25/98	
Supports Cook Inlet Areawide leasing. Regulations are in place to ensure an environmentally sound approach to development.	Comment noted. See Issue 10 in Section A "Common Issues." The history of the Kenai Peninsula over the last forty years has shown that fish, wildlife, and plant habitat, wildlife refuges, wetlands, commercial fishing areas, and recreation can exist with oil and gas development. The challenge is to balance these competing uses and to assure that development is done with minimum impact to the environment. Where adverse effects of oil and gas development cannot be avoided, mitigation measures are applied to activities so as to reduce or minimize those effects.

Doug Olson, Nikiski, 5/4/98		
Supports Cook Inlet Areawide lease sale.	Comment noted. See Issue 10 in Section A "Common Issues."	
Susan Olsen, Anchorage, 6/25/98		
Opposed to Cook Inlet Areawide lease sale. At a minimum, delete all private property, critical habitat areas, wildlife refuges, commercial and recreational fishing areas and recreational areas.	Comment noted. The history of the Kenai Peninsula over the last forty years has shown that fish, wildlife, and plant habitat, wildlife refuges, wetlands, commercial fishing areas, and recreation can exist with oil and gas development. See Issues 3 and 4 in Section A "Common Issues."	
A best interest finding simply cannot and does not consider in detail the effects oil and gas leasing will have on specific environments.	This is correct. To do so at the lease sale phase, when no specific project has been proposed would be speculative. ADNR considers the reasonably foreseeable cumulative effects of oil and gas leasing. See Chapters Five, Six, and Seven.	
The stakeholders group could not even agree to delete the Kenai River from the coverage of the lease area due to the opposition of the industry representatives.	Mitigation Measure Six provides a ½-mile setback from the Kenai River as recommended by the stakeholders group. See Chapter Nine and the response to Issue 3 in Section A "Common Issues."	
When the governor said, "we are open for business" I little imagined that he meant that the public domain was to be sacrificed.	The Governor consistently stated the state of Alaska welcomes environmentally responsible business development. The mitigation measures provide necessary environmental protections from potential adverse effects, thus protecting the public domain.	
Susan Olsen, Anchorage, 5/3/98		
Opposed to Cook Inlet Areawide lease sale.  Due to the vast size of the leasing area and the complexity of the issues associated with exploration or drilling, it is not possible to get meaningful public input.	It is the department's policy to encourage public participation in the lease sale process, and ADNR has received a multitude of meaningful comments regarding this lease sale. ADNR issued four calls for comments on this areawide sale. In addition to the calls for comments the department published display ads in newspapers statewide (Anchorage Daily News, Fairbanks News-Miner, Frontiersmen/Valley Sun, Juneau Empire, Peninsula Clarion, Homer News, Homer Tribune) seeking public comment. Additionally, there was a stakeholder process in September and October. The commissioner	

By the time a specific area is identified, it is too late for the public affected to stop the forthcoming exploration and possible development. The public's rights at that time are limited to receiving a copy of the plan the oil company intends to put in place and mitigation measures the company thinks necessary. The public will have no legal way to demand greater mitigation or to convince public officials to halt drilling or production.

convened a group of 11 Alaskans representing private landowners, environmental groups, tourism, oil and gas and support industry, Native corporations, tribal councils, commercial fishing, and sport fishing. The stakeholder process included public meetings in Wasilla, Anchorage, Soldotna, and Homer.

The permitting process provides a way in which to deal with issues of concern to the public. Most lease operations require multi-agency permits which are coordinated through the Office of the Governor, Division of Governmental Coordination. ADNR coordinates public notice for single-agency permits. The DGC circulates a proposed activity to the agencies and public for review, and produces a Proposed Consistency determination based on agency and public input. DGC is required to give public notice when a permit or plan of operations has been proposed in the coastal zone. DGC will forward relevant plans of operation to either the Kenai or Mat-Su Boroughs, or the Municipality of Anchorage. They will generate a list of the owners within one-half mile who will then be contacted by DGC. For permits which require ACMP review, public notices are placed in local newspapers and or posted at local post offices. From this review, conditions are developed to address any apparent deficiencies in the proposal, and make the project consistent with the ACMP and the local Coastal District Plans. The public is provided an opportunity to review and comment on these proposed conditions prior to them being finalized. In addition, the public has an opportunity to appeal every permit action through the relevant state resource agency.

The Commissioner's analysis is limited to general concerns and general mitigation measures that cannot possibly anticipate all that might occur. For example, the scenic resources section states: "mitigation of viewshed impacts is entirely project-specific and requires commitment on the part of industry and permit authorities." Since I am not willing to trust that the Commissioner and the industry will satisfy the concerns of those

The analysis is necessarily general because no specific project is proposed at the lease sale stage. Prior to any proposed project, a plan of operations must be approved by various agencies. This plan, when occurring in the coastal zone, must also undergo ACMP consistency review. There is ample opportunity for the public to comment during this review. Additionally, mitigation measure 28 addresses community concerns. Plans of operation

adversely affected, when both have already made a commitment to go forward, I oppose a ten-year best interest finding for an area of this size.	submitted for review and approval must describe the lessee's efforts to communicate with local communities, and interested local community groups, if any, in the development of such plans.
James Palmer, Anchorage, 4/30/98	
Supports Cook Inlet Areawide lease sale. Oil revenues have improved the quality of life in Alaska. Oil revenues have built the Coast Trail, the Loussac Library, the Performing Arts Center, the Sullivan Arena and contributed to the growth of the University of Alaska Anchorage campus.	Comment noted. See issue 10 in Section A "Common Issues."
Areawide leasing will make Alaska more competitive. Alaska's competitors are resource-rich countries abroad with policies and practices that make them much more attractive to investors. Areawide leasing will go a long way in keeping Alaska competitive.	Comment noted.
Jim Patten, Kenai, 6/26/98	
Supports Cook Inlet Areawide lease sale. For the past 40 years, oil and gas has been developed in an environmentally safe manner throughout the Cook Inlet and Kenai Peninsula. The industry will continue to develop in a safe manner for our children to have a future to look forward to.	Comment noted. See Issue 10 in Section A "Common Issues."
Robert T. Peterkin II, Kenai, 5/11/98	
Supports Cook Inlet Areawide lease sale. Oil and gas exploration has provided benefits to Alaska through scholarship programs, charitable donations, honor roll recognition awards, community-wide services, and reduced unemployment.	Comment noted. See issue 10 in Section A "Common Issues."
With today's technological advancements, research and exploration can continue without interruption to society, established estuaries, or wildlife sectors.	Comment noted.
Ernest Piper, Anchorage, 5/26/98	
Supports Cook Inlet Areawide lease sale.	Comment noted. See issue 10 in Section A "Common Issues."

## Kathleen Plunkett, Anchorage, 6/24/98

Supports Cook Inlet Areawide lease sale. Expect to retire here. This is a positive step for the area and has the proper controls already in place. Comment noted. See issue 10 in Section A "Common Issues."

#### Jeff Richardson, Homer, 6/29/98

Opposed to Cook Inlet Areawide lease sale. The preliminary best interest finding does not provide adequate justification for the sale as planned. The finding does not, in its current level of detail, reflect three decades of data collection.

The forecast of "no adverse impact on other uses in the lease sale area at the lease sale phase," with the promise of later mitigation (Page A-5) is not credible or realistic.

The analysis of immediate and cumulative impacts is inadequate. The finding fails to acknowledge the state's constitutional responsibilities for competent fish and wildlife management.

Comment noted. See response to Issue 1 in Section A "Common Issues." The finding includes thirty years of lease sale data collection and meets the statutory requirements of AS 38.05.035.

The director believes most values can be protected at the project level when specific activities have been proposed. See Chapter Eleven.

Fish and wildlife management is carried out by ADF&G. ADF&G fully participated in development of mitigation measures for Cook Inlet Areawide lease sales. ADF&G and other federal agencies also review development permits to ensure fish and wildlife resources are protected.

Under Article VIII § 1 of the Alaska Constitution "it is the policy of the state to encourage the settlement if its land and the development of its resources by making them available for maximum use consistent with the public interest. As a balancing agency, DO&G believes that oil and gas activity can co-exist with minimal impact to fish and wildlife.

Deficiencies in the analysis carries the implication that oil and gas development has priority over other resource uses and values and tends to oversimplify the impacts of one resource use on another. This is not consistent with state law, or with sound stewardship of publicly-owned resources.

This sale is consistent with the management of state lands under the constitutionally based principle of concurrent multiple use. ADNR considered all identified uses and resource values in the sale area, and measures to balance protection of the environment, the various public uses, and oil and gas exploration and development consistent with multiple use principles. Based on review of information available at this time, ADNR foresees no adverse impact on other uses in the lease sale area at the lease sale phase. If this lease sale results in leasing of sites that are considered for exploration or development at a later phase of this project, ADNR believes adequate protection can be achieved through the application of mitigation measures; existing federal, state, and local government restrictions; and site-specific project review.

Concerned as to whether the proposed sale and sale format are consistent with existing area management plans for state lands. There is no mention on page 8-2 of the area plans. The volume dealing with ACMP consistency also fails to reference this important authority for disposition of state lands.

In addition to compliance with these mitigation measures, lessees must comply with all applicable local, state and federal codes, statutes and regulations, and any subsequent amendments. Lessees must also comply with all current or future ADNR area plans and recreation rivers plans; and ADF&G game refuge plans, critical habitat area plans, and sanctuary area plans within which a leased area is located (see Chapter Nine).

The finding fails to capture the measurable economic consequences of negative impacts. The finding must consider the considerable intrinsic, social and economic values of fish and wildlife resources – values which are increasing and for which calculations are available in published literature.

The finding does consider the uses and value of fish and wildlife of the sale area (see Chapters Three and Four).

The division's response to my comment (page A-63) does not fully address my concerns. The finding presents no analysis of the state's ability to enforce these mitigation measures. The legislature has reduced resource agency budgets resulting in a reduction in field staff necessary to enforce environmental protection laws. It is irrational and inappropriate to assume that oil companies and their contractors will adequately comply with these measures without sufficient regulatory presence in the field.

Enforcement is done through site inspections by DO&G permitting staff. DO&G also relies on reporting of violations by the general public. Leases may be suspended or revoked if violations are brought to the attention of the division, and not corrected. Mitigation measures will apply to all leased lands. Industry oversight is present in nearly every aspect of oil and gas exploration, development, production, refining, transportation and marketing. Where inefficiencies may exist, the state and local governments rely on a combination of sources and watchdog groups to identify problems and present corrective measures.

The finding fails to acknowledge the growing accumulation of negative environmental impacts from urbanization, logging, oil and gas, tourism and other factors. It also fails to analyze the adequacy of proposed mitigation measures, nor of the state's ability to enforce

In addition to monitoring activities completed by DO&G; the EPA, ADEC, COE, USCG or AOGCC monitor compliance of activities under their jurisdiction.

No oil/gas exploration or development should be allowed in legislatively designated state game refuges, critical habitat areas or other areas important to fish and wildlife protection or propagation.

the mitigation.

Under AS 38.05.035(g), DO&G is only required to consider the reasonably foreseeable cumulative effects of oil and gas exploration, development, production, and transportation on the sale area (see Chapters Five, Six, and Seven). However, the ACMP Consistency Analysis for this sale considered other development and uses of the sale area. The best interest finding statute also only required DO&G to identify lease stipulations and mitigation measures and include a discussion of the protections offered by these measures.

An Areawide sale is inappropriate unless legislative and executive branches complete a science-based evaluation of habitat needs for fish and wildlife and take steps to prohibit industrial activity in those areas.

Comment noted. See response to Issue 3 in Section A "Common Issues."

Areawide leasing will not result in increased threat to natural resource values. The requirements for leasing are spelled out specifically by the legislature in the statutes. DO&G has fulfilled each of these requirements.

It is not clear in the finding whether existing oil spill prevention and response strategies are adequate in Cook Inlet.	ADNR is satisfied with the efforts directed toward oil spill prevention and response in Cook Inlet. Improvements continue to be made in planning and technology. State and federal agencies, industry, and concerned citizens groups are working together to prepare geographic response plans, which will describe site-specific response strategies for the Inlet. See Chapter Five for additional oil spill discussion information.
J. Brock Riddle, Anchorage, 6/29/98	
Supports Cook Inlet Areawide lease sale. I witness on a daily basis the efforts and integrity industry puts forth in reducing our impact on the environment.	Comment noted. See Issue 10 in Section A "Common Issues."
Janice Ryan, Anchorage, 5/26/98	
Supports Cook Inlet Areawide lease sale. Oil exploration and production can occur in an environmentally safe manner.	Comment noted. See Issue 10 in Section A "Common Issues."
George Schmidt, Anchorage, 5/28/98	
Supports Cook Inlet Areawide lease sale. Obviously not all of the area would be leased in any one sale, but in the interest of more efficient government, unnecessary steps should be eliminated. By far most of the area has been leased before, so a second round of environmental studies would be redundant.	Comment noted. See Issue 10 in Section A "Common Issues."
Commercial fishing harvests have increased in the 40 years since oil development began in Cook Inlet. Beluga whales, which depend on the salmon, and orcas which feed on the belugas, have continued to use the Inlet in preindustry numbers.	Comment noted. The Cook Inlet beluga population has declined in this decade, prompting concerns. See response to Issue 7 in Section A "Common Issues." See Chapter Six for effects of oil and gas on beluga whales.
Cook Inlet gas has not only enabled Southcentral Alaskans to light and heat their homes, but has made the communities safer by providing relatively cheap and dependable power for street lighting. Other benefits include jobs, which sustain families. These jobholders represent taxes paid to the local government to support schools, public safety and infrastructure.	Comment noted. See Chapter Seven.

#### Dan Seamount, 6/25/98

Supports Cook Inlet Areawide leasing. This sale is important for the well being of our children.

Comment noted. See response to Issue 1 in Section A "Common Issues."

## Alan Seegert, Denali Park, (date)

Opposed to Cook Inlet Areawide lease sale. No doubt it is in the interest of the trans-national oil companies, but despite all appearances to the contrary, corporate oil is not a proxy for all Alaskans. The scope and duration of this proposed lease is completely inappropriate. The state's refusal to remove any areas, including private property is incomprehensible. Take Alaska's energy policy out of medieval times, and maybe we'll have a palatable future to move into. Please cancel this ridiculous sale.

It would not be in the state's best interest to cancel the sale. The purpose of areawide leasing is to provide an established time each year that the state will offer for lease all available acreage within a geographical area. The result will be a stable, predictable leasing program, which will allow companies to plan and develop their exploration strategies and budgets years in advance. See response to Issues 2 and 4 in Section A "Common Issues."

## Brent M. Senette, Soldotna, 6/29/98

Supports Cook Inlet Areawide lease sale. At all three hearings held in Anchorage, Palmer, and Soldotna, public support was overwhelmingly in favor of the lease sale The citizens who attended those meetings represent the vast majority of people who are stakeholders in this issue.

Comment noted. See Issue 10 in Section A "Common Issues."

Areawide leasing will promote continued utilization of clean and low cost energy in Alaska, will contribute to the lower cost and more efficient administration of the state's leasing programs, will enable the oil and gas industry in Alaska to be more competitive in the global marketplace, will result in increased tax dollars to the state treasury, and will result in jobs for Alaskans.

Comment noted.

The \$45 billion in taxes and royalties paid by the industry in the last 40 years equates, on the average, to about \$130,000 per hour that has flowed into state coffers.

Comment noted. See Chapter Seven.

Stanley E. Senner, Anchorage, 6/28/98	
Not necessarily opposed to leasing, however opposed to leasing within or near state critical habitat areas, wildlife refuges, subsistence areas, commercial fishing areas, and other sensitive fish and wildlife habitats.	Comment noted. See Issue 3 in Section A "Common Issues."
Require setbacks of at least ½-mile from the floodplains of anadromous fish streams and from wetlands.	Comment noted. See response to Issue 5 in Section A "Common Issues."
Tamara Sheffield, Anchorage, 6/23/98	
Supports Cook Inlet Areawide lease sale.	Comment noted. See Issue 10 in Section A "Common Issues."
Richard H. Skeppstrom and Karen L. Ba	ngel, Portsmouth, VA, 6/29/98
Cook Inlet has not yet been impaired by resource extraction and other development. The exquisite rarity of Cook Inlet, by itself, confers immense value far in excess of any short term financial gains which could be realized by resource extraction.  It is clear that no effort is being made to minimize the impact of oil and gas extraction.	Oil and Gas exploration, development and production have been going on in Cook Inlet for over 40 years. DO&G believes that environmental protection can be and is achieved under the existing regulatory regime. DO&G also recognizes potential adverse effects of oil and gas activities through this document. Where adverse effects of oil and gas development cannot be avoided, mitigation measures are applied to activities so as to reduce or minimize those effects.
Oil and gas producers are allowed to freely discharge untreated wastewater containing petroleum contaminants as well as drilling mud into Cook Inlet. One wonders how it has slipped past EPA.	Comment noted. See Issue 9 in Section A "Common Issues."
No special attention is granted to flood plains, wetlands, critical habitat areas, wildlife refuges, recreational areas, or areas where natural beauty, cultural or historic values could be adversely impacted.	See response to Issues 3 and 5 in Section A "Common Issues." See also special area mitigation measures (21-23) and measure 16, Chapter Nine.
The brown bear population on the Kenai Peninsula is nearing a critical lower threshold and the population can no longer sustain itself.	See response to Issue 6 in Section A "Common Issues."

Why is there no mention of the Inter-agency Brown Bear Study Team in the preliminary best interest finding?

The Interagency Brown Bear Study Team is in the initial stages of development. ADNR will participate in the development of a conservation plan. The finding has been amended to include more recent information on Kenai Peninsula brown bears, including known migration and denning behavior. Mitigation measures 30 and 31 restrict operations to protect bear denning and migration. Lessee advisory 7 cautions that in bear feeding concentration areas, lessees may be required to locate exploration and development facilities beyond the 500-foot anadromous fish stream buffer. Any new significant information in the plan that may affect lease-related activities will be reviewed and the finding amended as warranted to ensure bears are protected Bear habitat is described in Chapter Three. See also Figure 3.6, Brown Bear Movement Corridors.

Why is ADNR rushing forward with this giant sale?

This sale has been in the planning process since 1993 and as an areawide sale since January 1997. ADNR has attempted to communicate the opportunities for public involvement in the sale process through a myriad of public notices and the stakeholders process. The stakeholders process included public meetings in the Matanuska-Susitna, Anchorage and Kenai Peninsula areas .See Chapter One, "Cook Inlet Areawide Process."

Why is there no cost/benefit analysis?

DO&G is required to describe reasonably foreseeable fiscal effects of the lease sale and subsequent activities on the state and affected municipalities and communities, but is not required to conduct a "cost/benefit analysis," which at the leasing stage would be speculative. Fiscal effects which are material to and within the scope of the best interest finding are described in Chapter Seven.

The longer extraction is delayed, the greater the price at the time of delivery. Since technology to reduce the adverse effects of oil and gas extraction improves with the passage of time, delaying the time of extraction should reduce the adverse impacts of that extraction. It is impossible to predict the course of energy prices. The Price of oil has fluctuated between \$9 and \$30 per barrel since 1990. Current technology is capable of extracting oil and gas reserves in a manner that protects the environment, however, this does not preclude adapting future technological changes.

Developing a resource gradually over a longer period of time requires a smaller work force and leads to a less severe community adjustment when that resource dwindles to total exhaustion. An influx of outside workers will displace other more stable life styles and cultures with a monoculture which collapses into chaos, dissolution, and permanent depression when the resource is exhausted.

The sale may create some new employment opportunities in the oil industry. This could help offset the job losses that have occurred on the Kenai Peninsula as a result of declining oil production. It is not possible to separate the impact of oil industry workers on wilderness areas, from other factors such as the annual influx of seasonal workers in other industries, tourists, and the general population growth of the KPB.

It isn't wise to drill in the shadows of four active volcanos. A minor variation on the events of 1964 could easily tear well casings asunder, scatter platforms, disrupt pipelines, and overwhelm storage facilities.

The area location within the coastal zone requires that plans of operation must be approved through the ACMP process before any drilling or production activities can occur. Such approval will be contingent on facilities being designed to withstand known geohazards. See Chapter Five "Geophysical Hazards." The Drift River terminal, which was subject to flowing muds of the Mount Redoubt eruption, has been diked and is again fully operational.

A large spill in Cook Inlet could easily have impact as great or greater that that of the *Exxon Valdez*. The risk of an oil spill outweigh potential benefits of the sale.

There is always some risk that a spill could result from exploration, production, storage, or transportation of oil. The state's policy is to stress prevention, and to minimize the likelihood for spills of any size. It is also the state's policy to improve the ability to respond to spills when they happen. See Chapter Five on oil spill prevention and response.

Other non-exploitation alternatives should be weighed against the sale proposal.

Comment noted. See response to Issue 2 in Section A "Common Issues."

## Scott R. Sloan, 6/25/98

Supports Cook Inlet Areawide lease sale. The oil and gas industry has a proven track record of safely and cleanly developing Alaska's hydrocarbon resources. Areawide sales should proceed and Alaska should continue to benefit from its natural resources.

Comment noted. See response to Issue 10 in Section A "Common Issues."

### Jeff W. Smetanka, 4/30/98

Supports Cook Inlet Areawide lease sale.

Comment noted. See response to Issue 10 in Section A "Common Issues."

## Chris J. Sonnichsen, 6/26/98 Supports Cook Inlet Areawide lease sale. On Comment noted. See response to Issue 10 and the Kenai Peninsula, the oil and gas industry is Chapter Seven "Fiscal Effects." a major source of jobs and support for the nonprofit community. Anita R. Stahl, Homer, 4/25/98 Opposed to Cook Inlet Areawide lease sale. Comment noted. See response to Issue 1 in Section A "Common Issues." ADNR is not required to hold this sale. Comment noted. See response to Issues 3, 4, 5, Remove all special and sensitive areas such as 8 and 9 in Section A "Common Issues." The critical habitat areas and high value wetlands best interest finding includes a discussion of from this sale. Remove private property. The cumulative impacts analysis must consider the reasonably foreseeable cumulative impacts. effects of past and existing developments and the reasonably foreseeable effects of this sale. Require zero discharge in Cook Inlet. Require ½-mile setbacks from the floodplains of rivers and streams. Richard Stewart, Anchorage, 4/30/98 Supports Cook Inlet Areawide lease sale. Comment noted. See response to Issue 10 in Technology has given explorationists tools Section A "Common Issues." See Chapter Six which are less invasive than before, and giving for a discussion of drilling technology. drilling and production engineers the ability to recover oil far more efficiently than before. Since oil and gas production began in Alaska, Comment noted. See response to Issue 10 and the state has received more than \$45 billion in Chapter Seven "Fiscal Effects." tax and royalty income. Cook Inlet oil and gas furnish Southcentral Comment noted. See response to Issue 10 in with heating oil, natural gas, gasoline, propane, Section A "Common Issues." butane, jet fuel, asphalt, and even fertilizer. Good high-paying jobs allow citizens to contribute to their communities. A recent public opinion poll (Dittman Comment noted. Research, 1997) shows overwhelming support for the Areawide leasing concept, and a trust of the petroleum industry to act responsibly, as it has in the past. The Areawide procedure greatly streamlines Comment noted. See response to Issue 10 and the otherwise time-consuming and piecemeal Chapter One.

procedures which governed lease sales in the past. There is a rigorous permitting process

which must be followed before a lease can be drilled, so there is more than adequate opportunity for public input at all stages of the process.			
Michael J. Stover, 6/26/98			
Supports Cook Inlet Areawide lease sale. Responsible oil and gas development and environmental protection have coexisted and will continue to do so under Areawide leasing.	Comment noted. See response to Issue 10 in Section A "Common Issues."		
The BIF aids in addressing development and environmental concerns, while Areawide Leasing offers a reliable schedule of lease sales which translates to efficient project management and hence, cost effectiveness.	Comment noted. See response to Issue 10 in Section A "Common Issues."		
Interested in seeing Alaska maintain competitiveness at attracting capital with other oil and gas producing regions. Areawide leasing is a critical step in assuring our competitiveness in the world arena.	Comment noted. See response to Issue 10 in Section A "Common Issues."		
Kent St. John, Anchorage, 5/26/98			
The availability of Cook Inlet gas have kept electrical prices at a very competitive rate. It is a clean source of efficient energy.	Comment noted. See response to Issue 10 in Section A "Common Issues."		
R. John Strasenburgh, Anchorage, 6/28/98			
Opposed to Cook Inlet Areawide sale. The preliminary best interest finding's contention that "developing the state's petroleum resources is vital to the state economy and the well-being of its citizens" is not supported by your analysis and is not true.	ADNR believes that this sale is in the states best interest and that the analysis supports this decision.		

According to Scott Goldsmith's new book, the state makes considerably more money from its financial investments than it does from oil. Neither this nor other economic options is factored into the preliminary analysis.

The Alaska Permanent Fund was created to set aside some of the state's oil wealth. As of 1998 the fund had grown to over \$25 billion and currently generates earnings that are greater than those from oil and gas revenue. This is due to the current low price of oil and the high return on Permanent Fund investments. These numbers fluctuate greatly from year to year. Earnings from the Permanent Fund are used for dividends and inflation proofing. Any remaining money is deposited into the earnings reserve and is currently not available for general fund expenditures. This will require an act of the legislature or a vote of the people. See Chapter Seven, "Fiscal Effects."

Considering that 60 percent of the state's population live in the sale area and considering the heavy impact of development, development following this sale will be more difficult to control. Thus, the state should return to smaller, specific leases whose impacts it is able to assess and manage.

Offering smaller sales more frequently is less economical and less efficient. In the past, industry would nominate acreage to be included in an oil and gas lease sale only to find that when the sale actually took place two to three years later, their interest and priorities would have shifted to a different area. One of the reasons why the legislature amended AS 38.05.035 and encouraged areawide leasing was to resolve this problem. With areawide leasing, all available acreage will be offered, after public comment, on an annual basis. Offering large areas for lease in no way presumes resultant development would be any more extensive than from a smaller-sized sale.

In reviewing Appendix A of the preliminary best interest finding, I note that 93 percent of the Public Comments oppose the sale. The general public is very concerned about the adverse impacts the sale, if implemented, is certain to have.

DO&G is aware of opposition to this sale. Since issuing the preliminary finding last March, the sale has also received a great deal of support. As a balancing agency, DO&G believes that multiple use can occur on state lands and that adverse impacts can be mitigated.

The lack of responsiveness to those concerns in the preliminary finding runs contrary to Governor Knowles' commitment to meaningful public involvement.

It is the department's policy to encourage public participation in the lease sale process. ADNR issued four calls for comments on this areawide sale. In addition to the calls for comments the department published display ads in newspapers statewide There was a stakeholder process in September and October. The Commissioner convened a group of 11 Alaskans representing private landowners, environmental groups, tourism, oil and gas and support industry, Native corporations, tribal councils, commercial fishing, and sport fishing. The stakeholder process included public meetings in Wasilla, Anchorage, Soldotna, and Homer. Each of these processes generated information on public concerns and offered suggestions which have been incorporated into this final finding.

For example your response to the concern that drilling will occur on private property failed to address the fundamental issue that the State disposed of lands under the Open to Entry and Remote Parcel programs for purposes of backcountry recreation, not for purposes of being next to an oil rig. The Patents contain boilerplate language regarding subsurface rights and contradicts the purpose of the State's remote recreation disposal programs. Delete private property from the sale.

When the state transfers the surface estate: it retains the subsurface (there are some exceptions for lands privately owned prior to statehood). The reservation includes the right to use the surface to develop the subsurface as well as to use existing facilities such as roads for the benefit of the entire state. Under the Alaska Statehood Act, Congress provided that if Alaska disposed of its mineral estate contrary to the Act it would have to forfeit that mineral estate to the federal government. The language of the patents are more than boilerplate. They are enforceable provisions of the sale contract and put there to protect the states economic interest. See response to Issue 4 in Section A "Common Issues."

Effects on area residents and visitors are not meaningfully evaluated. For example, on page 11-2, the finding provides a very general and incomplete statement of the types of adverse impacts of oil and gas development.

Page 11-2 is part of Chapter Eleven, "Conclusion." It is a brief summary of information presented in earlier chapters. Please see chapters Five, Six, and Seven, for more complete information.

The statement that "(M)ost disturbance effects would be temporary during development and construction" is incorrect. Much of the lease area is roadless, and for the most part the people who live and recreate off the road system like it that way. How then could the construction of a road have only temporary effects?

The preliminary finding does not adequately address impacts on wildlife. For example, on page 3-21 it states that "limited information is available on brown bear population size, seasonal habitat use, and movements. The brown bear population remains unsurveyed ...." On pages 3-19 and 3-20, brown bear is not mapped. This "no science" runs contrary to the governor's "sound science" principle.

Mitigation measures are also general and incomplete. For example, the brown bear measure (page 11-5) state that lessees are only "encouraged" to prepare and implement bear interaction plans. Page 9-9 provides some specifics on what a plan might contain. The measures fail to include requiring lessees to avoid bear denning areas.

Construction of permanent roads is prohibited. Temporary roads may be allowed. DO&G believes that removal and rehabilitation of temporary roads can be accomplished without causing long-term damage to habitats. There are established methods for the removal and rehabilitation of roads. Corrective actions can also be taken to limit the ability of off-road vehicles to use such roads. See also Mitigation Measure 3.

The finding has been amended to include more recent information on Kenai Peninsula brown bears, including known migration and denning behavior. The Interagency Brown Bear Study Team is in the initial stages of development. ADNR will participate in the development of a conservation plan. Any new significant information in the plan that may affect lease-related activities will be reviewed and the finding amended as warranted to ensure bears are protected Bear habitat is described in Chapter Three. See also Figure 3.6, Brown Bear Movement Corridors. See response to Issue 6 in Section A "Common Issues."

ADNR, with the assistance and concurrence of ADF&G, developed mitigation measures and lessee advisories to minimize impacts on brown bear. Mitigation Measure 26 encourages lessees to prepare and implement bear interaction plans. Mitigation Measure 30 requires lessees to confirm the location of den sites and prohibits exploration and development activities within ½-mile occupied dens between November 15 and March 15. Mitigation Measure 31 restricts exploration activities in brown bear movement corridors. Under Lessee Advisory 7 and 8, lessees may be required to locate development and production facilities beyond the 500-foot buffer along fish bearing streams and outside brown bear movement corridors.

Mitigation measures are primarily limited to officially designated critical habitat areas and do not address important habitat areas that might not have that formal designation.

Mitigation measures apply primarily throughout the entire sale area. Mitigation Measure 21 and 22 set more stringent mitigation measures for state game refuges, critical habitat areas, and critical waterfowl habitat.

The fact that the preliminary best interest finding, in spite of the DO&G's best efforts, is in this feeble condition only reinforces my contention that the Sale is too large to effectively manage. Therefore the sale should be cancelled.

ADNR believes the analysis and finding address the full geographic area, as required. Offering acreage doesn't necessarily mean it will be leased. A 1995 study by ADNR shows that about half the tracts (51.6) percent offered in state oil and gas lease sales have been leased. Statistically, exploratory drilling has occurred on only 8.5 percent of leases in the Cook Inlet area. About five percent of the tracts leased have been commercially developed for oil and gas production. This means that only a small percentage (approximately threepercent) of state lands offered for lease have been commercially developed for oil and gas production, and these sales only involved acreage nominated by industry. With areawide leasing, DO&G does not anticipate a large increase in the number of tracts leased, beyond what can be effectively managed

## Thomas M. Stroman, Kenai, 5/8/98

Supports Cook Inlet Areawide lease sale. Continued oil and gas development is critical for Southcentral Alaska, which relies on Cook Inlet for heat and power. Oil and gas production helps pay property tax, supports thousands of jobs and provides inexpensive electricity. Cook Inlet remains just as beautiful as it was when the first well was drilled.

Comment noted. See Issue 10 in Section A "Common Issues."

## Randy Super, Juneau, 5/25/98

Opposed to Cook Inlet Areawide lease sale. Delete high value wetlands, critical habitat areas, recreation areas, and all private property. Comment noted. See Issues 3 and 4 in Section A "Common Issues."

Require ½ mile setbacks from rivers and streams and zero discharge should be permitted into Cook Inlet.

Comment noted. See Issues 5 and 9 in Section A "Common Issues."

ADNR is not required to hold this sale and there is no good reason for it. I do not want oil

Comment noted. See Issue 1 in Section A "Common Issues."

drilling in my front yard.

# John R. Swanson, Minneapolis MN, 6/22/98

Opposed to Cook Inlet Areawide lease sale. This lease sale will decimate the Cook Inlet area, devastating fish and wildlife and plant habitat, wildlife refuges, wetlands, commercial fishing areas, and recreation opportunities

The history of the Kenai Peninsula over the last forty years has shown that fish, wildlife, and plant habitat, wildlife refuges, wetlands, commercial fishing areas, and recreation can exist with oil and gas development. The challenge is to balance these competing uses and to assure that development is done with minimum impact to the environment. Where adverse effects of oil and gas development cannot be avoided, mitigation measures are applied to activities so as to reduce or minimize those effects.

This sale will also create massive water and air pollution problems and seriously impact private property.

All activities associated with the areawide sale will have to meet state and federal statutes and regulations which define air-quality standards in terms of maximum allowable concentrations of specific pollutants for various averaging periods. Federal and state statutes and regulations that will mitigate potential impacts air quality include: 42 U.S.C. §§ 7401-7642. Federal Clean Air Act and AS 46.03 which Provides for environmental conservation including water and air pollution control, radiation and hazardous waste protection.

Also, 18 AAC 50, provides for air quality control including permit requirements, permit review criteria, and regulation compliance criteria and

18 AAC 50.300, sets up standards for air quality at certain facilities including oil and gas facilities at the time of construction, operation, or modification. Where measures are in place to protect water quality and fish and wildlife and their habitats, civil or criminal penalties for willful contamination may be levied (AS 31.05.150). Specific restrictions on oil and gas activities apply to anadromous streams, public water supplies, some marine waters, and other environmentally sensitive areas. See Chapter Two on sale area hydrology and Chapter Five on water quality.

Suggests zero discharge for all forms of pollution in Cook Inlet  Preserve salmon habitat and establish the Cook Inlet area as a Marine Habitat Sanctuary.	Comment noted. See Issue 9 in Section A "Common Issues."  ADF&G protects salmon streams under Title 16. Mitigation Measure 17 reinforces the authority bestowed in Title 16 of the Alaska Statutes which restricts the alteration of anadromous fish streams or lakes, and prohibits blockage of anadromous fish passage (See AS 16.05.870).	
Jim Thompson, Kenai, 6/9/98		
Supports Cook Inlet Areawide lease sale.	Comment noted. See Issue 10 in Section A "Common Issues."	
Richard Tyler, Homer, 5/7/98		
Opposed to Cook Inlet Areawide lease sale. With the price of crude oil down, and the price of refined oil at the pump high, someone is making out like a bandit.	Comment noted.	
Everyone complains that the state coffers are running dry because the price of oil is low, so they rush to cut the state's percentage even more. With the price of oil low, there is obviously no great shortage of oil at present, so what exactly is all this hysteria about? It is becoming trite to reiterate that any oil left untouched underground today will be immeasurably more valuable in the future.	Currently there is an oversupply of oil on the world market resulting in low prices and reduced income for the state. Assuming there are commercial quantities discovered from this lease sale, it may take 5 to 10 years for production to come online. It is impossible to predict the course of energy prices and what they might be 5 to 10 years from now. The Price of oil has fluctuated between \$9 and \$30 per barrel since 1990. This sale will provide a local source of oil and gas and help keep Alaskans employed. See response to Issue 10 in Section A "Common Issues."	
Charles A. Underwood Jr., Anchorage, 6	/29/98	
Supports Cook Inlet Areawide lease sale. Forty years of industry activity in Cook Inlet has not contributed to a decline in other valuable natural resources present in the area.	Comment noted. See Issue 10 in Section A "Common Issues."	
Progress has been made in minimizing surface impacts which is reflected in the environmental and safety record and response organization of operators here.	Comment noted. See Chapter Six.	

Due to the availability of Cook Inlet production, utility rates in Southcentral Alaska are often lower than in the rest of the nation. Continued leasing is critical to maintain this economic benefit.	Comment noted. See Issue 10 in Section A "Common Issues."
William O. Vallee, Anchorage, 6/16/98	
Supports Cook Inlet Areawide lease sale. Areawide leasing means more than just jobs. The oil and gas industry is the lifeblood of the economy and creates job opportunities. These opportunities have helped raise and educate families here.	Comment noted. See Issue 10 in Section A "Common Issues."
Natural gas development has reduced the cost of living, and has provided us with inexpensive electricity and heating.	Comment noted. See Issue 1 and 10 in Section A "Common Issues."
Areawide leasing should mean greater efficiency in state government and with its planning processes.	Comment noted.
The industry's record in Alaska is outstanding, and the people of this state should place their support of this process by becoming involved as much as possible and by embracing this policy of bold thinking by the dedicated people of the Alaska Division of Oil & Gas.	Comment noted.
Arndt von Hippel, Anchorage, 6/26/98	
This area is heavily populated and very few of us want an oilrig in our neighborhood.	Mitigation measure 29 specifically requires that when surface activities are proposed on private land, the lessee must submit to the private surface owner a plan of operations that describes the lessee's efforts to minimize impacts on residential areas and privately-owned surface lands. DO&G has found industry willing to accommodate reasonable requests and take extraordinary steps to see that local concerns are met promptly and fairly. In turn, once area residents understand what and how a proposed operation is to be done, consensus is generally reached. In addition to compliance with sale area mitigation measures, lessees must comply

requirements.

with all applicable local codes and zoning

Modern drilling techniques allow extraction without undue intrusion, however, oil companies follow the bottom line and will only behave as well as they have to. Areawide leasing will not encourage them to be good neighbors.

Industry will have to comply with all applicable federal, state and local environmental laws and regulations as well as lease mitigation measures, coastal zone consistency determinations and plan of operations mitigation measures that regulate actual on-site operations.

## Stanley T. Warta, 6/26/98

Supports Cook Inlet Areawide lease sale. Currently forced to work away from my children due to the decline in production of oil and gas in Kenai area. Opening up acreage to drilling may revitalize local oilfield production. Comment noted. See Issue 10 in Section A "Common Issues."

# Gordon Wetzel, 6/25/98

Supports Cook Inlet Areawide lease sale. This system is the result of careful consideration of the interests of all Alaskans and it has been scrutinized in due public process.

Comment noted. See Issue 10 in Section A "Common Issues."

## Jeff Williams, 6/25/98

Supports Cook Inlet Areawide lease sale. Oil and gas development has been conducted responsibly and in an environmentally sound manner.

Comment noted. See Issue 10 in Section A "Common Issues."

## Ruth D. Wood, Anchorage, 6/27/98

Opposed to Cook Inlet Areawide lease sale. Because of the extensive damages listed in Chapter Eleven that will result if leasing goes forward, mitigation measures must be strong, precise, binding, and enforced. However, the mitigation measures in Chapter Seven (listed as Chapter Seven at the top of each page) do not meet these criteria.

Some mitigation measures contain "feasible and prudent" language to give the state flexibility when considering alternatives at future permitting phases. ADNR may include new mitigation measures at the time it reviews lease plans of exploration, operation, or development. The mitigation measures are binding, are attached to leases as a result of the sale and are conditions that will be imposed on plans of operation before lessees can proceed with any activity. Lessees may be required to post bonds to ensure that they comply with the terms of the lease. In addition to compliance with mitigation measures, lessees must comply with all applicable local, state, and federal codes, statutes and regulations, and any subsequent amendments including the ACMP and local district plans.

Mitigation measure 7 on page 9-3, the word "should" carries no legal weight. Replace with "shall."

Measure 7 was proposed and debated by the Cook Inlet stakeholders. The term "should be limited" is a consensus position reached by the stakeholders.

Rephrase measure 7 to read,

"The siting of new facilities in key wetlands and sensitive habitat areas is prohibited. Exceptions shall require unanimous approval of the Director of ADNR, Board of Game, the Board of Fisheries, and the Board of the Citizen Advisory Group (this last, of course, requires establishing such a group). No exception shall be made without: 1.) concurrent and unanimous approval by these same people of a 100% mitigation plan; and, 2.) written agreement by the lessee to implement the plan, such plan to include penalties and fines for noncompliance."

Each and every mitigation measure should be rewritten such that they are mandatory, enforceable, and carry penalties and fines for noncompliance.

The mit attached condition operation operation operation operation operation.

What is a lessee advisory? It is not defined in the finding. Advisory #5 is a meaningless piece of drivel that will accomplish nothing.

Regarding compensation for damages, property owners expect the state of Alaska to protect our interests. The state should make the statutory and constitutional changes necessary to protect the interests of Alaskans who already live and recreate in these areas.

I would take exception to your response to Issue #3 in the preliminary finding appendix if I thought you really would require something in areas with no local planning and zoning. The mitigation measures are binding, are attached to leases as a result of the sale and are conditions that will be imposed on plans of operation before lessees can proceed with any activity. Lessees may be required to post bonds to ensure that they comply with the terms of the lease.

Mitigation measures are generally enforceable by the resource agencies. Some Lessee Advisories are informational, others, ADNR does not have the direct authority to enforce, and others restate existing statutes or regulations.

Statutes exist that ensure damages to private property are compensated for. See response to Issue 4 in Section A "Common Issues."

In this area, lessees must comply with mitigation measures as well as applicable local, state, and federal codes, statutes and regulations, and any subsequent amendments including the ACMP and local district plans.

Disagree with response to Issue #4. Despite stating that the sale is consistent with the principle of multiple concurrent use, you offer no evidence to support such. This sale will give priority to oil and gas leasing over all other land and water uses.

My original letter of July 1997 did not specifically deal with Issue #10, however, the unwillingness of ADNR to even consider deleting all or certain areas, such as Critical Habitat Areas, State Game Refuges, state and federal parks, is further evidence that ADNR has no interest in dealing with the public's concerns, but rather intends to cater to the desires of the oil and gas industry.

The oil and gas industry has coexisted with the fishing, timber, tourism, recreation, subsistence and other for nearly 40 years in Cook Inlet. This history shows that these resources can be developed together to form a diversified economic base.

State and federal parks are not included in the sale area. Creation of a critical habitat area does not necessarily preclude oil and gas leasing. Some CHA's are open to oil and gas surface entry, other's are not (see Chapter Four). Creation of a state game refuge closes an area to hunting but not to oil and gas development. ADNR responds to public concerns by placing additional restrictions on oil and gas activities in these areas. They are described in Chapter Nine "Mitigation Measures."

## Neva Wynn, Kenai, 6/26/98

Supports Cook Inlet Areawide lease sale because it provides us with heat and power.

Industry has done a good job producing oil and gas in a safe, clean and healthy manner. Move forward with Areawide leasing to ensure a good future for our children.

Comment noted. See Issue 10 in Section A "Common Issues."

Comment noted.

## Ken Zafren, Anchorage, 4/27/98

Opposed to Cook Inlet Areawide lease sale. While I am not opposed to oil and gas development, the idea of an annual sale for 10 years without further review is ludicrous. The oil companies will be reviewing their interests every year; the State of Alaska should also.

During the 10 years following a best interest finding for a sale area, annual sales can be held without DO&G having to generate an entirely new finding. However, it may be necessary for DO&G to supplement the finding prior to a lease sale. Prior to each annual sale, ADNR will request new and significant information that has come available since the previous lease sale. This request will be advertised in statewide newspapers, and will be sent to everyone on the Cook Inlet Areawide Sale mailing list. This list currently has over 1,500 organizations and individuals including members of the public, environmental groups, industry, Native corporations, and state, federal and local government agencies. Based on this information, ADNR may supplement the finding prior to holding the next annual sale.

New information could result in the inclusion of additional mitigation measures or the removal of certain areas from leasing. The size of the sale is staggering, but there is Measures to protect habitats and commercial no protection for wildlife habitat, commercial fishing beyond what is already required by fishing areas or private property. Delete these existing law (See Chapter Eight and Appendix B) are presented in Chapter Nine. See response areas. to Issues 3 and 4 in Section A "Common Issues." There is no adequate protection for Cook Inlet Mitigation Measure 1 requires lessees to or rivers and streams in the area. This should include in their oil spill contingency plans methods for detecting, responding to and also be provided before a sale could be considered. controlling blowouts; the location and identification of oil spill cleanup equipment; the location and availability of suitable alternative drilling equipment; and a plan of operations to mobilize and drill a relief well. Mitigation Measure 6 establishes buffers for all fishbearing streams and lakes. Mitigation Measure 17 lists measure that will be imposed by ADF&G under Title 16. Mitigation Measure 22 prohibits surface entry into critical waterfowl habitat along the Kasilof River. See Chapter Five, "Watershed Protection Measures." The proposed Sale is structured for short-term The history of Cook Inlet oil and gas gains, which are projected to be modest, development over the last forty years has without regards to the long-term consequences, shown that oil and gas, can be conducted which may be severe. without significant impacts to the environment and, on balance, the benefits outweigh the risks. Jeffrey M. Zeman, Anchorage, 6/26/98 Supports Cook Inlet Areawide sale. There is no Comment noted. See Issue 10 in Section A reason to slow down this lease sale process or "Common Issues." burden it with unnecessary restrictions. Kaynell Zeman, Anchorage, 6/26/98 Supports Cook Inlet Areawide sale because Comment noted. See Issue 10 in Section A leasing contributes to inexpensive gas to heat "Common Issues." homes, increased job opportunities, revenues to fuel the state economy, increase Alaska's competitive position in the global oil market, revenues to the permanent fund dividend.

Benefits of leasing include the permanent fund dividend, freedom to drive cars, buses, airplanes, boats, wear tennis shoes, sun glasses, machinery for our farmers and factories: the list goes on and on.

McDougall, Darin

Comment noted. See Issue 10 and Chapter Seven "Fiscal Effects."

The following submitted comments by email: I am an Alaska resident and I support the Cook Inlet Areawide Lease sale. Signatories are asked to see response to Issue 10.

Brenegan Rick T.		Miller, Betty L.	
Coston John D.		Miller, Fred A.	6/26/98
Crockett Marilyn		Morell, Martin	
Darrell Rosiere		Moreno, Marilu C.	
Davenport,Jim		Neighbors, Joel	
Dennis Lew D.		Nelson, Joel D.	
Don K. Smiley		Paris, Chester E.	
Doug VanWingerden		Patricia,	
Douglas Donna J.		Petrov, Michael	
Dusenbery Rick A.		Power, Dee	
Felix Rick		Preston, Shirley	
French Michael W.		Pye, Mel	
Green Timothy D.		Renee, Miller	
Heywood Craig E	6/25/98	Reneiase, D. Bagsby	
Jay Grover	6/25/98	Ruppert, Doug W.	
Kilfoyle,Jeffery A.	6/25/98	Sanford, Bryon K.	
Kissinger,Matt D.	6/25/98	Schneider, Paul	
Klimowski,Ed		Scott, LaVoie	
Konrad, Ken		Steve, M. Antonucci	
Lafferty,Dave		Tanner, Lee	
Laube, Jeffrey D.		Tanner, Lee	
Leavens, JoAnna Tomuro		Thoelke, Greg R	
Lemley, Kenneth		Thomas, Clint	
Little, Bill		Trina, Cooper	
Lutsch, Christie		Virgil, Thrapp	6/25/98
Lynn, John E.		Walters, David A.	
Mayer, Ken		Weaver, Patty	
McCaughey, Thomas		Weiler, Bruce	

Zoschak, Robert G.

The following submitted comments in support of the sale citing economic benefits of jobs and tax revenue, the need for a low-cost energy source, the cost effectiveness and efficiency of areawide leasing, and the safe environmental record of industry. Signatories are asked to see response to Issue 10.

Audette, Louis Jr.	5/18/98	Marshall, Thomas R. Jr.	6/23/98
Baker, Frank	5/18/98	Martens, Dana	5/18/98
Barclay, Ben	5/18/98	McClanahan, Shively A.	5/18/98
Becker ,Charles F.	5/18/98	McHalle, James E.	5/18/98
Blixhaven, B.	5/18/98	McLaughlin, Bill	5/18/98
Borderieux, G.M.	5/18/98	Mello, Chris	5/18/98
Buono, Judith E.	5/18/98	Messina, J.R.	5/18/98
Colas, Lauren	5/18/98	Miller, Robert E.	5/18/98
Collier, T.S.	5/18/98	Mishina, Dennis K.	5/18/98
Cook, Thomas	5/18/98	Morrison, Glenn R.	5/20/98
Denney, James H.	5/18/98	Niles, Beverly G.	6/23/98
Devereaux, Robert S.	5/18/98	Noffile, Julia	5/18/98
Cox, Robert E.	5/18/98	O'Connor, Michael	5/17/98
Dorsey, Celeste B.	5/18/98	Peter, Steven S.	5/18/98
Ellis, John N.	5/18/98	Pitlo, Stan W.	6/17/98
Evans, Tom	5/18/98	Reeves, Susan E.	5/18/98
Faulkner, Sewell F.	5/18/98	Roberts, Steven C.	5/18/98
Frasca, Cheryl	5/18/98	Rockhill, George	5/18/98
Freeman, Ken	5/18/98	Rockhill, Theresa	5/18/98
Gay, B.L.	5/16/98	Ruckman, B. J.	6/9/98
Giaimo J.	5/18/98	Sandraweier, Sam	5/18/98
Gibson Jim	5/18/98	Schoephoester, W. B.	5/18/98
Green, Hayden	5/18/98	Schultz, D.F.	5/18/98
Guyer, Keith O.	5/18/98	Schwartzbauer, Sandra	5/18/98
Harner, Greg	5/18/98	Schweitzer, Bob	5/18/98
Haugen, David	5/18/98	Shields, Mary E.	5/18/98
Heffner, Keith E.	5/18/98	Smith, Eric	undated
Hegna, Joe	5/18/98	Snider, R.K.	5/18/98
Heinze, Harold C.	5/18/98	Southall, Bob	5/18/98
Hendriks, Jerry	5/18/98	Springer, Heinrich	6/23/98
Hendrix, Thomas	5/18/98	Stearns, Thomas	5/18/98
Hensley, Febra	6/9/98	Steffan, Daniel J.	5/20/98
Hensley, Joey M.	6/10/98	Stinson, Ted	5/18/98
Holhsen, A.	undated	Stocker, G.R. (Pete)	5/18/98
Hunter, Tom	5/18/98	Tabler, Kevin	5/18/98
Husby, John	5/18/98	Tapp, M.V.	5/18/98
Jones, Margaret S.	5/18/98	Triab, Michael T.	5/18/98
Katyryniuk, Mike	5/18/98	Trudell, Stephen E.	5/18/98
Kershberger, Chris	5/18/98	Tuckness, Barbara Huff	5/18/98
Lamont, George	5/18/98	Underwood, Charles A. Jr.	5/18/98
Lauder, Karen A.	5/18/98	Wetmore, Chris	5/19/98
Lean, Edmund R.	5/18/98	Wilcox, Dan	5/18/98
Leavy, Linda	5/18/98	Worcester, Mark	5/18/98
Lewis, John	5/18/98	Zeman, Jeff	5/18/98
Lively, Brit	5/18/98		
Maad, Joanne M.	5/18/98		

_	•	B 1	-		
En	П		$\mathbf{\Lambda}$	te	
1211	u	1.4	•	u	•

Nora Cousens, et al., Petaluma California was a form letter signed by 35 people, some identified as California residents and others with no address. Three identical letters were sent to the division: two originating from North Bay CA, and one from Sacramento CA.

# D. Comments and Responses Prior to Preliminary Best Interest Finding

(Appendix A of Preliminary Best Interest Finding Issued March 31, 1998)

Many commentor's letters raised similar concerns regarding Cook Inlet Areawide Lease Sale. Section I of this appendix includes a summary of common issues, and DNR's response. Section II includes all comments received preceding this preliminary best interest finding and DNR's responses. Comments were submitted in response to:

- Call for Comments on Five-Year Oil and Gas Leasing Program issued July 21, 1992 Deadline August 21, 1992
- Second Call for Comments issued December 21, 1993 Deadline June 15, 1994
- Call for Comments Five-Year Oil and Gas Leasing Program issued July 7, 1994 Deadline September 7, 1994
- Third Call for Comments issued January 28,1997 Deadline July 28,1997

#### **Common Issues**

**Issue 1**. The sale area is too large (4.2 million acres). The state should identify smaller tracts and offer them on a yearly basis. Once the lease area is open, it stays open for a decade, essentially without public review.

The state of Alaska has been gathering and analyzing data on the effects of oil and gas activities in the Cook Inlet area for more than 30 years. Most of the acreage in this sale has been offered and analyzed many times before. Baseline information on the sale area collected by state entities including the University of Alaska have been incorporated into this best interest finding. Thus, this finding draws on three decades of Cook Inlet lease sale research (see reference lists at the end of each chapter). In addition to information submitted by the public, state, federal, and local agencies with professional expertise in many disciplines have contributed to this document.

The purpose of areawide leasing is to provide an established time each year that the state will offer for lease all available acreage within a geographical area. The result will be a stable, predictable leasing program, which will allow companies to plan and develop their exploration strategies and budgets years in advance.

Offering smaller sales more frequently is less economical and less efficient. In the past, industry would nominate acreage to be included in an oil and gas lease sale only to find that when the sale actually took place two to three years later, their interest and priorities would have shifted to a different area. One of the reasons why the legislature amended AS 38.05.035 and encouraged areawide leasing was to resolve this problem. With areawide leasing, all available acreage will be offered, after public comment, on an annual basis.

During the 10 years following a best interest finding for a sale area, annual sales can be held without DO&G having to generate an entirely new finding. However, it may be necessary for DO&G to supplement the finding prior to a lease sale. Prior to each annual sale, DNR will request new and significant information that has come available since the previous lease sale. This request will be sent to everyone on the Cook Inlet Areawide Sale mailing list. This list currently has over 1,500 organizations and individuals including members of the public, environmental groups, industry, Native corporations, and state, federal and local government agencies. Based on this information, DNR may supplement the finding prior to holding the next annual sale. New information could result in the inclusion of additional mitigation measures or the removal of certain areas from leasing.

Areawide leasing increases the public's opportunity to comment on re-offered sales by requiring the request of new and significant information. Previously, DNR was not required to call for comments when re-offering tracts. Under areawide leasing, the public will have the opportunity to comment on the sale each year for 10 years. See Chapter One.

**Issue 2**. Most people do not own the subsurface rights to their property and it can be leased by the state. If leased, drilling rigs have the right to enter private land.

Alaska statutes and regulation are explicit about how surface and subsurface owners and lessees must interact. See Chapter Two "Description of Properties Offered and Location."

The relevant portions of AS 38.05.125 and AS 38.05.130 are paraphrased below:

AS 38.05.125 Reservation. (a) Each contract for the sale, lease or grant of state land, and each deed... is subject to the following reservation:

"... Alaska, hereby expressly saves... and reserves out of the grant . . . forever, all oils, gases, coal, ores, minerals, fissionable materials, geothermal resources, and fossils of every . . . kind . . . which may be in or upon said land . . . and the right to explore the same . . ., and it expressly saves and reserves . . . the right to enter . . . upon said land, . . . at any and all times for the purpose of opening, developing, drilling, and working mines or wells . . . and taking out and removing . . . oils [and] gases . . . and to that end it further expressly reserves . . . the right to erect, construct, maintain, and use all such buildings, machinery, roads, powerlines, and railroads, sink such shafts, drill such wells, remove such soil, and to remain on said land . . . for the foregoing purposes and to occupy as much of said land as may be necessary or convenient . . . expressly reserving to itself, its lessees, successors, and assigns, . . . all rights and powers in, to, and over said land . . . reasonably necessary or convenient to render beneficial and efficient the complete enjoyment of the property and rights hereby . . . reserved."

That language is part of each deed awarded. When the state transfers the surface estate; it retains the subsurface. The reservation includes the right to use the surface to develop the subsurface as well as to use existing facilities such as roads for the benefit of the entire state. Protection from damages is afforded surface owners at AS 38.05.130:

## AS 38.05.130. Damages and posting of bond.

Rights may not be exercised by the state, its lessees, successors or assigns under the reservation . . . [AS 38.05.125] . . . until the state, its lessees, successors, or assigns make provisions to pay the owners of the land full payment for all damages sustained . . . by reason of entering upon the land. If the owner refuses . . . to settle the damages, the state, its lessees, successors, assigns . . . may enter upon the land in the exercise of the reserved rights after posting a surety bond determined by the director, after notice and an opportunity to be heard, to be sufficient as to form, amount, and security to secure . . . payments for damages, and may institute legal proceedings . . . to determine to damages which the owner may suffer.

There are general stipulations in the regulations at 11 AAC 96.140 that address seismic and other land use permits. Most relevant here is number 10:

No person may engage in mineral exploratory activity on land, the surface of which has been granted or leased by the State of Alaska . . . until good-faith attempts have been made to agree with the surface owner . . . on settlement for damages . . . . If agreement cannot be reached, . . . operation may be commenced . . . only with specific approval of the director, and after making adequate provisions for full payment of any damages . . . .

Then, there are lease mitigation measures, coastal zone consistency determinations and plan of operations mitigation measures that regulate actual on-site operations. For example, proposed mitigation measure 29 specifically requires that when surface activities are proposed on private land, the lessee must submit to the private surface owner a plan of operations that describes the lessee's efforts to minimize impacts on residential areas and privately-owned surface lands.

DNR has some background with this issue. A few years ago, ARCO drilled a test well in a residential area near Big Lake. Residents expressed concerns similar to those being raised here. ARCO took steps to keep the public as informed as possible. Neighborhood meetings were held to address concerns, including those that could be considered nuisance factors, and the well was drilled without incident. Other than increased activity over the short-term, most residents were unaware of any extraordinary noise and no problems were encountered.

In a second instance, a petroleum company contracted for a large seismic survey. This, too, was conducted in the Big Lake area where approximately 1,200 landowners were involved. Of that number 19 remained unconvinced and a bond was required to be posted under the provisions of AS 38.05.130 (above). Activity commenced and no damage resulted.

Recently, another company conducted a significant seismic survey on the Kenai Peninsula. It involved approximately 26 square miles and the cooperation of 2,000 landowners. The program was completed successfully. Additional bonding was not required and no damage has been reported.

The division has found industry willing to accommodate reasonable requests and take extraordinary steps to see that local concerns are met promptly and fairly. In turn, once area residents understand what and how a proposed operation is to be done, consensus is generally reached.

The issue of private property rights was considered during the Stakeholder's process for the Cook Inlet Areawide lease sale and resulted in a policy on private property entry.

All multi-agency permits are coordinated through the Office of the Governor, Division of Governmental Coordination. DGC is required to give public notice when a permit or plan of operations has been proposed in the coastal zone. DGC will forward relevant plans of operation to either the Kenai or Mat-Su Boroughs, or the Municipality of Anchorage. They will generate a list of the twenty-five closest property owners, or all of the owners within one-half mile, which ever is smaller. DGC will notify those affected owners of the opportunity to participate in the review. DNR will fulfill DGC's responsibilities for significant projects located out side the coastal zone. Mitigation Measure 29 requires that when lessees propose surface activities on non state-owned land, they must submit a copy of their plan of operations to the private surface owner. The plans of operation must describe the lessee's efforts to minimize impacts on residential areas and privately-owned lands.

**Issue 3**. The state may exempt itself from zoning regulations. Industrial zones, Mental Health and other state lands could be open to drilling, adjacent to areas of high use.

The state does not exempt itself from zoning regulations. It is the lessee, not the state that conducts drilling operations. While it is possible that drilling rigs may enter private lands, the lessees are subject to all applicable local, state and federal regulations (see Paragraph 11d of the contract). This includes zoning regulations. Drilling may occur in "industrial zones" or other areas where a local zoning ordinance permits it. DNR has included proposed Lessee Advisory 6 which reads: "In populated areas where there is no local planning and zoning, DNR may require approval of plans of operation that permanent structures be designed to be compatible with the aesthetics of the surrounding area."

No Mental Health Trust land is included in the areawide sale. Mental Health Trust land is distinct from other state land in that it is managed by the Mental Health Trust Authority solely in the best interest of the trust and its beneficiaries. The Mental Health Trust Authority may offer its lands for oil and gas leasing, but this would be totally separate from the state's leasing program. **Issue 4**. Sale 85 effectively gives priority to Proposed Sale 85 is consistent with the oil and gas leasing over all other land and management of state lands under the water uses. Some people reject the state's constitutionally based principle of concurrent position that it can mitigate use conflicts with multiple use. ADNR considered all identified fishing, hunting, recreation, subsistence, uses and resource values in the proposed sale wilderness, wildlife and wetland protection. area, and measures to balance protection of the environment, the various public uses, and oil and gas exploration and development consistent with multiple use principles. Based on review of information available at this time, ADNR foresees no adverse impact on other uses in the lease sale area at the lease sale phase. If this lease sale results in leasing of sites that are considered for exploration or development at a later phase of this project, ADNR believes adequate protection can be achieved through the application of mitigation measures; existing federal, state, and local government restrictions; and site-specific project review. **Issue 5**. There is no need for the sale. There is significant public need for the revenue and energy that areawide leasing will generate Although Sale 85 is on the Five-Year leasing plan, it isn't required to be leased. Tracts due to the decline of oil production on the North Slope and in Cook Inlet. From Talkeetna within a portion of this large sale area are being re-offered because they didn't sell to Homer, Cook Inlet natural gas is needed to heat homes and businesses, and provide electric earlier. power for society to function. Existing users, like the Tesoro refinery, Unocal's urea and ammonia plant, Phillips' LNG plant, and

Enstar (serving residences and businesses) will need oil and gas to meet future energy needs. As a result, significant benefits could result from the Cook Inlet Areawide Sale at the state and local level. See Chapter Seven "Fiscal Effects," and the ACMP Analysis for a

discussion of the importance of oil and gas revenue to the state economy. Tracts within this sale area have been previously offered and re-offered. Industry has a limited amount of money to bid in any given sale. They must prioritize their bids based on which tracts they find most promising. If they are out bid by a competitor, it may free up money to bid on other tracts in a subsequent offering. Industry's interest in a particular area can change over time as new information becomes available. Today's low priority tract can become tomorrow's "hot prospect." Likewise, tracts that draw high bids today may be relinquished in the future if they fail to meet expectations.

**Issue 6**. Directional drilling is unlikely to work well because of Cook Inlet's fractured geology. DO&G touts directional drilling to downplay the potential large numbers of drill rigs that could be used to extract oil from underneath Anchorage or other critical places in the sale area.

Cook Inlet presents more obstacles to directional drilling than the North Slope because of its many coal seams and faults. Therefore, directional drilling should not be thought of as a solution to every surface use conflict. However, the statement, "directional drilling is unlikely to work well," overstates the limitations of this technology. Directional drilling is currently being used successfully in Cook Inlet with typical horizontal displacements of one half mile to two miles. Until there is a specific project whose location is known and geology evaluated, it is impossible to predict if directional drilling is feasible in a particular area. Drilling technology is advancing rapidly and sites that are not accessible today may be in the future.

**Issue 7**. The maps are inadequate and misleading. The maps include areas where the state does not have authority to lease. The maps do not contain enough detail for the public to adequately comment. Provide detailed maps which citizens can use to identify their own parcels.

Earlier Calls for Comments included a simple map showing the areawide region boundary, but did not contain the specific information on land status. For this areawide sale the department has produced detailed tract maps showing sub-surface ownership, areas with nosurface-entry provisions, areas where drilling is prohibited by zoning, major roads, and important recreational areas, like critical habitats and state and national parks (see Plate I at the back of this finding). No areas will be leased without proper authority. National and state parks are not available for leasing. Surface entry is prohibited in recreation areas

and in portions of some critical habitat areas.Restrictions on oil and gas activities apply to many special areas, such as tidelands, rivers, and lakes (see Chapter Nine).

In addition to the tract map, the department has created a 382-page atlas of every township within and immediately adjacent to the area discussed in this finding. These maps, at a scale of 1:63,360 (1" =1 mi.), consist of merged databases from various sources, and show a greater detail of information, including individual parcels (i.e. lots). The atlas is available for viewing by the public at the Kenai Peninsula Borough Planning Dept. in Soldotna, The Mat-Su Borough Planning Dept. in Palmer, The Municipality of Anchorage Clerk's Office in Anchorage, and the Homer City Clerk's Office. Copies of these atlas maps will be generated for individuals at cost upon request.

**Issue 8.** DO&G has not held any public meetings requesting information about the sale area, or notified anyone not already on its mailing list as a result of previous comments on other sales.

DO&G's mailing list for this areawide sale contains over 1.500 individuals and organizations. Anyone can be added to the mailing list by contacting DNR. It is the department's policy to encourage public participation in the lease sale process. In addition to the calls for comments the department published display ads in newspapers statewide (Anchorage Daily News, Fairbanks News-Miner, Frontiersmen/Valley Sun, Juneau Empire, Peninsula Clarion, Homer News, Homer Tribune) seeking public comment. Additionally, there was a stakeholder process in September and October. The Commissioner convened a group of 11 Alaskans representing private landowners, environmental groups, tourism, oil and gas and support industry, Native corporations, tribal councils, commercial fishing, and sport fishing. The stakeholder process included public meetings in Wasilla, Anchorage, Soldotna, and Homer. Following the release of this preliminary finding there will be an additional 90-day comment period. During this comment

period DO&G has scheduled four public meetings, in Soldotna, Homer, Palmer and Anchorage. The meeting schedule is:

April 27, Soldotna: Central Peninsula Sports

Center, K-Beach Road

April 28, Homer: Homer Elks Club

April 29, Palmer: Mat-Su Borough Assembly

Chamber, 350 E. Dahlia Ave.

April 30, Anchorage: Steller Secondary School,

2508 Blueberry Street

All of the meetings will start at 7:00 p.m.

**Issue 9**. Industry has yet to comply with the Governor's directive. Governor Knowles, after the Sale 85A stakeholder process, directed AOGA to identify areas of no industry interest. These areas could then be deleted from the Cook Inlet Areawide Sale.

There was no directive to AOGA to identify areas of low or no industry interest. In a letter to the stakeholders dated March 18, 1997. Governor Knowles "asked Commissioner Shively and staff to work with AOGA to identify areas where there is no interest in leasing and determine if those areas can be deleted from the area in which DNR proposes to lease." Identification of such areas was a non-consensus item with the Sale 85A stakeholders. Oil companies are reluctant to identify areas where they believe there is an oil or gas deposit as this is confidential information which could cost the companies a competitive edge. Furthermore, AOGA is a trade organization of nineteen companies. It does not include all companies that might have an interest in the areas to be offered. It would be inappropriate for the state to delete areas from the lease sale boundary solely on the advice of a certain organizations which do not represent all of industry.

Areas of industry interest change from year to year. In the past, industry would nominate acreage to be included in an oil and gas lease sale only to find that when the sale actually take place two to three years later, their interest and priorities would have shifted to a different area. One of the reasons why the legislature amended AS 38.05.035 and encouraged areawide leasing was to resolve this problem. With areawide leasing, all available acreage will be offered, after public comment, on an annual basis.

Issue 10. Suggestions to delete some or all of the following areas: Critical Habitat Areas, State Game Refuges, state and federal parks, tracts south of Ninilchik, offshore areas south of Kalgin Island, Tuxedni Bay, Redoubt Bay, Trading Bay, the Kachemak Bay watershed, Turnagain Arm, Potter Marsh, Kenai, Anchor, Kasilof, Susitna, Eagle, rivers, tracts south of 60 degrees, 20 minutes north latitude.

ADNR foresees no adverse impacts or incompatibility with the purposes, values or uses of any of these areas as a result of the lease sale phase of proposed Sale 85. Surface entry is prohibited in Critical Habitat Areas, and State Parks and Recreation Areas. Oil and gas development is permitted in some State Game Refuges and Critical Habitat Areas with surface entry restrictions. In other SGR's and CHA's oil and gas development is prohibited. The Division of Oil and Gas has an agreement with the Division of Parks that there will be no leasing within state parks. There are no federal parks within the sale area. If any site in these areas is eventually targeted for exploration or development in a later phase, adequate protection can be achieved through site-specific project review and imposition of mitigation measures as warranted.

# Agency And Public Comments Federal Agencies

United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Steven Pennoyer, Administrator, 6/2/97

NMFS commented that he Cook Inlet beluga whale justifies specific measures to protect it. Annual aerial surveys indicate a population of about 1,251 whales. The Susitna River appears to be particularly important. Whales calve in the upper Inlet during the spring and early summer. The warmer waters of an area of concentrated food source for the belugas. Cook Inlet belugas are hunted by Alaska Natives for subsistence. The most important areas include the mouths of the Susitna, Little Susitna, Ivan, Beluga, and Chikaloon Rivers.

Based on the 1997 Stock Assessment Report, the current Cook Inlet beluga whale population is 834 animals. The 1,250 estimate was based on a 1995 assessment report, which has been adjusted due to improvements in survey methods. Beluga whales feed on hooligan (eulachon) and calve at the mouths of rivers between May 1 and July 31. Location of important harvest areas have been incorporated into the finding. NMFS and the Marine Mammal Conservation Council are drafting management regulations to protect Cook Inlet's beluga whale population.

NMFS is concerned that the Cook Inlet beluga whale might be adversely affected by oil and gas development. The beluga whale can be very sensitive to disturbance and has been observed avoiding small boats operating near Anchorage. Activities which may harass or harm belugas, or which may adversely affect the availability of the species to subsistence hunters must be authorized under the Marine Mammal Protection Act. Authorizations may be requested through NMFS.

Potential effects of oil and gas activities on beluga whales are discussed in Chapter Six. In the foreword to the proposed mitigation measures, lessees are advised that in addition to compliance with these mitigation measures, lessees must comply with all applicable local, state, and federal codes, statutes and regulations, and any subsequent amendments. This includes the MMPA.

NMFS recommends deleting any tracts within five miles of the mouths of the following waters: Little Susitna River, Susitna River, Theodore River, Beluga River, Chuitna River, Nikolai Creek, Chakachatna River, Middle River, McArthur River, and Chikaloon River. While other tracts may occupy summer beluga habitat, NMFS does not feel that normal oil and gas activities will have significant effects.

Because there is no indication that existing or ongoing activities have had any populationlevel effect on the Cook Inlet beluga whale stock, deleting such areas is not necessary at the lease sale phase in order to protect beluga whales. Existing and proposed protection measures will be applied as appropriate to postsale activities. In addition to compliance with the MMPA, lessees must comply with all applicable policies of the ACMP and district plans. Measure 6 prohibits the siting of facilities within one-half mile of the banks of Harriet, Alexander, Lake, Deep and Stariski creeks, and the Drift, Big, Kustatan, McArthur, Chuitna, Theodore, Beluga, Susitna, Little Susitna, Kenai, Kasilof, Ninilchik and Anchor rivers. Lessees are required to comply with proposed Mitigation Measure 15, which protects the subsistence harvest. This measure states that lease-related use will be restricted when the commissioner determines it is necessary to prevent unreasonable conflicts with local subsistence harvests. Conflicts can be avoided with alternative site selection. requiring directional drilling, seasonal drilling restrictions, subsea completion techniques, and other technologies deemed appropriate by the commissioner.

United States Department of the Interior, National Park Service, Robert D. Barbee, Regional Director, 9/12/94, and John M. Morehead, Regional Director, 6/15/94.

NPS believes that oil and gas operations are incompatible with the purposes for which these areas were established and therefore opposes those portions of the proposed sale areas that are located adjacent to Denali National Park, Katmai National Park, and Lake Clark National Park. NPS requests that the proposed sale areas exclude the upland areas and/or coastal waters adjacent to the above national parks.

The proposed Cook Inlet Areawide region is outside the boundaries of Lake Clark National Park and Preserve, Denali National Park and Katmai National Park and therefore should not interfere with NPS management. ADNR foresees no incompatibility with the purposes and values of the identified parks as a result of the lease sale phase of Sale 85. ADNR believes that, although no incompatibilities are apparent or foreseeable at this stage, if there were indications or evidence of incompatibilities with the Parks purposes in the future, adequate measures are available to provide protection. See Chapters Eight and Nine.

The proposed sale area should exclude all trust lands which were affected by the *Exxon Valdez* spill that have not recovered to their pre-spill condition.

ADNR concludes that it is not necessary to delete these areas from the proposed sale area at this time. No "large parcel" trust lands habitat acquisitions are located in or near the proposed sale area. Some "small parcel" acquisitions are located on the east side of the inlet and around the mouth of the Kenai River. The map of areas oiled by the EVOS indicates no shoreline was oiled north of Anchor Point. ADNR foresees no impact on these areas at the lease sale phase. If this lease sale results in leasing of sites that are considered for exploration or development at a later phase of this project, ADNR believes adequate protection can be achieved through the application of mitigation measures; existing federal, state, and local government restrictions; and site-specific project review.

The sale area located within Lake Clark Pass should be excluded. This pass is the gateway through which most visitors access Lake Clark National Park. Oil and gas activities would have a detrimental effect on the visual qualities of the natural landscape.

Should any activity be proposed within Lake Clark Pass, DNR may require that permanent structures be designed to be compatible with the aesthetics of the surrounding area.

A cumulative impact analysis should be conducted as part of the lease sale process and should include an analysis of lease sale activities to further affect trust lands affected by the <i>Exxon Valdez</i> .	Reasonably foreseeable cumulative effects of leasing, exploration, development, production, and transportation on fish and wildlife, habitats, and their uses, including commercial, recreational and subsistence uses in the proposed region are discussed in Chapters Five, Six, and Seven.
The lease sale process should recognize the values for which Denali, Katmai, and Lake Clark National Parks were established and fully evaluate the potential for these values to be adversely affected by oil and gas operations.	ADNR recognizes important habitats and recreational areas within or near the Cook Inlet Areawide region in Chapter Four. DNR does not foresee any affects on recreational use or other values of these areas as a result of oil and gas activity.
If leasing should occur adjacent to any of the above areas, the following stipulations are recommended:  a. The adoption of environmental constraints, such as those developed for operations in and around the offshore islands of Katmai National Park following the <i>Exxon Valdez</i> spill.	DO&G welcomes suggestions from NPS for the development of mitigation measures. Please provide specific proposed mitigation measures for consideration in the final finding. NPS may also comment at the plan of operations stage when permits are issued and recommend additional mitigation measures at that time.
b. The positioning of spill response equipment at strategic coastal/upland sites.	It is not within DNR's authority to require operators to stockpile spill response equipment. However, ADEC's regulations require operators to have necessary equipment on hand, to access more equipment through agreements and to describe such equipment and arrangements in their oil spill contingency plans. See Chapter Five, "Specific Issues," on spill prevention and response.

c. The establishment of shoreline monitoring stations in clams and mussels for increasing contaminant levels from low level release of hydrocarbons in the water column from oil and gas operations.	Since the summer of 1993, CIRCAC has conducted a pilot monitoring program of Cook Inlet and not found harmful levels of industry byproducts in sediments. A recently completed study by the University of Alaska, Anchorage issued to MMS found "extremely low concentrations of contaminants, making the inlet 'generally free from toxicity'" (Anchorage Daily News 1995:B-1). DO&G encourages the continued sampling and testing of species which may contain or store industry contaminants. The MMS is continuing to research hydrocarbon levels in its current study of sediments in the Lower Cook Inlet. DO&G is monitoring their results. The need for monitoring is being addressed. The Governor has introduced legislation which would provide for a water quality monitoring tax credit
d. Adopt procedures to ensure timely coordination with NPS personnel in the event of a spill.	program.  The Unified Plan (The Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharge/Releases) fully describes the response action and coordination efforts of all government agencies. USDOI and its agencies have helped develop the governments C-plan. NPS is represented by USDOI and would join the Incident Command System if national park lands are involved with a spill.
We request the opportunity to review subsequent lease sale information when it is available.	Comment noted. The NPS is on the Cook Inlet Areawide mailing list.
United States Department of the Interior, National Park Service, John M. Morehead, Regional Director, 6/15/94.	
Oil and gas operations are incompatible with the purposes for which Denali, Katmai, and Lake Clark National Parks were established. The boundary of Katmai National Park includes all islands located within five miles of the coast. Most of Katmai National Park is designated wilderness.	Comment considered above

Coastal touring off the Katmai coast is increasing. NPS is concerned that oil and gas operations, including the use of aircraft, ships, and offshore rigs, would affect the quality of the coastal viewshed and could affect the quality of wilderness experience.	Katmai National Park is more than a hundred miles from the southern boundary of the Cook Inlet Areawide region. DNR does not expect any oil and gas activities to affect its coastal viewshed or impact the quality of wilderness experience.
Air pollutants emitted from oil and gas operations could affect the visibility and vegetation within the Denali, Katmai, and Lake Clark National Parks. NPS will review Prevention of Significant Deterioration permit applications and provide comments on possible air quality impacts to the National Park System.	Comment noted. Potential effects of oil and gas activities on air quality are discussed in Chapter Six.
These national parks are also vulnerable to oil and hazardous substance spills and spill response activities.	Industry oil spill contingency plans must identify environmentally sensitive areas and areas of public concern and develop response plans for areas that might be affected by a spill from their operations. The Alaska Regional Response Team, comprised of federal agencies and the state of Alaska also prepared the Cook Inlet Subarea Contingency Plan that identified sensitive areas. The US Department of the Interior is a member of the ARRT and contributes to the government contingency planning projects. The USDOI represents the National Park Service and other agencies within its department.
The latest information about the <i>Exxon Valdez</i> spill impacts needs to be considered.	DO&G has reviewed the latest results of <i>Exxon Valdez</i> oil spill studies. Settlement moneys from the <i>Exxon Valdez</i> tanker spill have been devoted to environmental research including the fate and effects of oil discharges on the marine environment. Most of these studies are ongoing and focus on natural resource damage assessment and restoration of affected species and resources. Although the bulk of projects specifically apply to Prince William Sound and other spill affected areas, some studies are relevant to Cook Inlet.

Oil and gas activities could be counterproductive to efforts by *Exxon Valdez* spill trustees to restore resources injured by the spill. The strategies proposed by the trustees are intended to minimize additional stress to impacted resources still recovering. Any additional impact from oil and gas activities will likely have a cumulative impact on these resources.

Only a small portion of shoreline (near Anchor Point) was oiled by the *Exxon Valdez* oil spill and there is no indication that offshore impacts to juvenile salmon affected runs in Cook Inlet. Where adverse effects of oil and gas development cannot be avoided, mitigation measures are applied to activities so as to reduce or minimize those effects.

Land managers, including the NPS, are presently faced with the responsibility of cleaning up the hazardous wastes of oil and gas exploration activities conducted along the Gulf of Alaska.

The exploration to which NPS is referring to took place in the late 1950's and early 1960's and was not subject to the same environmental laws and mitigation measures that will be imposed on the proposed areawide lease sale. For more information on powers to regulate oil and gas activities, see Chapter Eight.

NPS is concerned about the potential development of onshore support facilities adjacent to National Park System units including terminals, refineries, pipelines, employee housing and roads. Support facilities have their own set of impacts, and need to be considered by the cumulative impact analysis.

Until exploration takes place it is impossible to determine where terminals, refineries, pipelines, employee housing and roads will be located. See Chapters Six and Seven. DO&G has analyzed effects which are reasonably foreseeable, without speculation. If support facilities are proposed, their plans of operations will undergo a thorough review. It is likely that new discoveries would use existing facilities to the extent feasible. This would be more economical and create less of an impact. See Chapter Six, "Cumulative Effects." DO&G has analyzed effects which are reasonably foreseeable, without speculation.

Subsistence resources and use may be adversely affected by oil and gas operations and need to be considered.

Current subsistence use and potential effects on subsistence are discussed in Chapters Four and Six. Proposed mitigation measures that address subsistence are discussed in Chapter Nine. Subsistence resources and uses are protected under the ACMP.

The sale planning process should consider the potential for oil and gas operations to affect other significant natural and cultural resources, including unknown submerged cultural resources.	DO&G is required to identify known archaeological sites and consult the Department of Natural Resources Office of History and Archaeology in preparing this preliminary finding. Potential effects on historic and cultural resources are discussed in Chapter Six. Proposed Mitigation Measure 16 is designed to protect known and unknown prehistoric, historic and archaeological sites.
The McNeil River State Game Sanctuary National Natural Landmark is located on the west side of Cook Inlet adjacent to the sale area. The Yukon Island Main Site National Historic Landmark is located in the vicinity of Homer, Alaska.	Neither of these sites are within nor adjacent to the proposed Cook Inlet Areawide lease sale boundary. DO&G has reviewed and considered information provided by the Office of History and Archaeology for consideration of potential effects on cultural resources and historic landmarks.
The proposed sale area appears to include both the Clam Gulch State Recreation Site and the Captain Cook State Recreation Area. NPS would like to see that the resource values for these areas protected.	These recreation areas are within the proposed Cook Inlet Areawide lease sale and surface entry is prohibited.
Information about cultural resource sites, such as the Takli Island Archeological District, which may be eligible for listing in the National Register of Historic Places, may be obtained from the DNR, Office of History and Archaeology. NPS recommends that available offshore resource data, such as side scan sonar records, be interpreted by a qualified archeologist or geomorphologist.	As noted above, DO&G considered information provided by the Office of History and Archaeology for consideration of potential effects on cultural resources and historic landmarks. Potential effects on historic and cultural resources are discussed in Chapter Six. Proposed Mitigation Measure 16 is designed to protect known and unknown prehistoric, historic and archaeological sites. The suggestion regarding interpretation of side-scan sonar records has been forwarded to DPOR.
Spill prevention and emergency response preparedness should be adequately considered and should address the following:  a. The regulation of oil and gas engineering standards and practices to minimize the risk of spills.	AOGCC inspects blowout equipment. Operators follow the American Petroleum Institute Recommended Practices for platform and pipeline operations. DO&G is reviewing the possible inclusion of API Recommended Practices in regulations. The report, <i>Platform Evaluation Cook Inlet, Alaska</i> by Belmar Engineering, December 1993, contains information regarding standards and practices. For more information on spill prevention and response, see Chapter Five, "Specific Issues."

b. The adequacy of existing spill clean-up technologies in light of the severe weather conditions regularly encountered in Cook Inlet.	The Alaska Regional Response Team, comprised of federal agencies and the state of Alaska, evaluate the adequacy of existing and new spill clean-up technologies in various weather conditions through its Response Technologies working group. For more details on oil spill prevention and response, see Chapter Five, "Specific Issues."
c. Lessees should routinely be required to demonstrate the capability to implement approved oil spill prevention and contingency measures.	State and federal agencies require operators to exercise their contingency plans per the schedule incorporated in their plan and determined by the US Coast Guard, EPA and ADEC. Most companies conduct spill drills annually, varying the extent of the exercise.
d. The feasibility of using local, trained response teams and equipment, which has been stored at coastal population centers and other strategic locations.	Response organizations such as CISPRI incorporate the use of trained local responders in their response plans. In addition to industry's response resources, the Kenai Peninsula Borough has taken possession of ADEC's response barge, the <i>Alaska Responder 650</i> in Seldovia. Local responders are maintaining the barge and may include the equipment in an April 1998 drill in Homer.
There should be an analysis of oil and gas activities' potential to affect submerged and onshore cultural and natural resources, including helicopter and airplane traffic, house-keeping spills, produced water discharge, drilling fluids and cuttings, crew and workboat traffic, rig and facility trash, flaring of gas, and increased user demands on wilderness areas by petrochemical workers.	Effects of aircraft traffic and other oil and gas activities, such as flaring of gas, are discussed in Chapter Six "Cumulative Effects." Natural gas is occasionally flared for safety reasons. Under 20 AAC 25.235 operators must minimize the volume of gas released, burned, or permitted to escape into the air. Operators must report monthly to AOGCC any flaring event which lasts over an hour. AOGCC investigates these incidents to determine if there was unnecessary waste. Effects of oil and gas activities, including discharge of muds and cuttings on water quality, and oil spill prevention and response are discussed in Chapter Five. Proposed Lessee Advisory 4 restricts aircraft operations within several State Game Refuges. Proposed measures 18 and 19 restrict solid waste and wastewater disposal. Produced waters are discussed in Chapter Five. Drilling muds and cuttings are discussed in Chapters Five and Six. Proposed measure 18

	regulates the disposal of drilling muds and cuttings.  At the lease sale stage it is impossible to predict where oil and gas development will take place offshore, or what the level of crew and work boat traffic or demands of petrochemical workers will be. If exploration and development do occur, the lessee must obtain state approval of a detailed plan of operations. The proposed activity must comply with the proposed mitigation measures, coastal zone consistency review standards and other state or federal agency authorizations or permits. At the plan of operations stage potential impacts can be assessed and, if necessary, additional protective measures can be implemented.
A chronic problem common to all shorelines influenced by offshore oil development will be oil industry trash that ends up as flotsam and debris on beaches.	DO&G is unaware of oil industry-generated debris washing up on beaches in Cook Inlet. The diivision would be interested in any evidence to support this claim for consideration in the final finding.
The lease sale planning process should consider:  a. Major spills from production facilities or transport barges/tankers	Major spills from production facilities and marine vessels are discussed in the oil spill section in Chapter Five. In addition, industry operators must prepare extensive oil and hazardous substances discharge contingency plans. These plans must include scenarios applicable to their facilities.
b. Rig fires	Rig fires may produce a light, short-term coating of soot over a localized area. However, soot produced from burning oil spills tends to slump and wash off vegetation in subsequent rains, limiting any health effects (MMS, 1994, IV.B.1-95). The oil spill contingency plans that the industry must produce for their facilities and that are reviewed by state and federal agencies and local citizens groups such as the Cook Inlet Citizens Advisory Council must consider reasonably foreseeable events in their planning process.

c. Barge, tanker, workboat groundings	Barge, tanker, workboat groundings could result in an oil spill. Oil spill prevention and response are discussed in Chapter Five.
d. collisions with rigs and well heads	Collisions with rigs and well heads may result in damage to the rig or well head. A collision could result in an oil spill and perhaps a fire. Oil spill prevention and response is discussed in Chapter Five.
e. sinkings	A sinking could result in an oil spill. Oil Spills are discussed in Chapter Five.
f. the potential for volcanic activity to affect oil and gas operations and facilities	Geophysical hazards are discussed in Chapter Five. Companies carefully plan for anticipated geophysical hazards.
The planning process should consider deferring this lease sale until other areas having less ecological risk, such as pristine wilderness, have been offered.	Offering leases in areas of existing development offer an opportunity to take advantage of existing facilities. This allows for economically sound projects and ultimately results in less impact to the environment. Cook Inlet is an oil and gas basin. The state has offered for lease areas outside the producing areas of Cook Inlet and the North Slope with very little success. Few oil and gas reserves have been discovered outside these producing areas since the leasing program began in 1959. DNR believes that tract deletions are not necessary to protect natural resource values because proposed mitigation measures and existing rules and regulations coupled with modern exploration and production methods ensure that resource values and uses are protected. Chapter Eight presents a list of governmental powers that regulate oil and gas activities. Proposed mitigation measures and lessee advisories are presented in Chapter Nine
DO&G should consider the alternative of revitalizing previously declining oil fields located in developed areas through the expanded use of advanced exploratory technology.	Currently, industry is revitalizing existing declining fields in Cook Inlet with the use of more efficient drilling techniques and tools, and high resolution seismic data. While new technology may extend existing field life, it is not a suitable alternative to offering acreage in undeveloped areas.

The planning process should consider the need for mitigation for the loss of aesthetics, wilderness, fish and wildlife (including threatened and endangered species), habitat, recreational, visitor, cultural resources, and ecological networks that support subsistence and commercial users.

The best interest finding process resulted in the development of mitigation measures to ensure that these resource values are protected. Proposed mitigation measures and lessee advisories are found in Chapter Nine. Effects of oil and gas activities on resources and uses and mitigation strategies are discussed in Chapters Five and Six.

#### Wildlife mitigation should include:

a. Deletion from the lease sale of those areas which are important for subsistence activities and marine mammal calving, or migratory corridors.

Nearly all tracts in the proposed sale area are important for subsistence activities or are migratory corridors. Proposed lease sale mitigation measures are developed to ensure activities do not hinder migration, access to resources or subsistence harvesting. Proposed Mitigation Measure 15 restricts lease-related use when the commissioner determines it is necessary to prevent unreasonable conflicts with local subsistence harvests and commercial fishing operations. As specific projects are proposed, habitat-use evaluations will be completed as part of the plans of operations review; additional mitigation measures will be imposed when necessary. Under proposed Mitigation Measure 25, surface entry within the Kenai Lowlands Caribou Herd core caribou calving area is prohibited. Surface entry for seismic exploration within this area will be allowed from October 16 to March 31 because the herd is not present at this time. Major rivers that provide migratory corridors have a ½ mile buffer.

b. Limiting of exploratory and drilling operations to winter as necessary to minimize wildlife impacts.

In general, offshore exploration and drilling operations are conducted from mid-April to mid-November due to ice conditions in Cook Inlet. Onshore exploration and drilling operations may be conducted year-round. Seismic exploration is typically conducted in winter. Proposed Mitigation Measure 3 requires that onshore exploration activities be supported by air service, an existing road system or port facility, ice roads, or by vehicles which do not cause significant damage to the ground surface or vegetation. Restricting operations to winter months without exception would not be feasible. Starting and stopping

operations seasonally would result in delays and increased operating costs. Lessees must obtain approval of a detailed plan of operations from the director before conducting exploratory or development activities.

### United States Department of the Interior, National Park Service, Joan Darnell, Chief, Division of Environmental Quality, 8/21/92

There is a potential for oil and gas activities adjacent to the Parks and Preserves and related oil spills to adversely affect the nationally significant natural, cultural, recreational and wilderness resource values of these units.

This statement is true. Cumulative effects of oil and gas activities are discussed in Chapter Six. Specific effects, including effects on water quality and the potential for oil spills are discussed in Chapter Five. DO&G has developed proposed mitigation measures which are designed to minimize potential negative effects from oil and gas exploration, development and production. Please see Chapter Nine.

All activities within any unit of the National Park System where oil and gas rights are not owned by the United States where access is on, across, or through federally owned or controlled lands or waters, are subject to regulation under 36 C.F.R. Part 9, Subpart B.

National parks are not included in the proposed Cook Inlet Areawide lease sale.

NPS is responsible for the protection and enhancement of air quality in units of the National Park System. Air pollutants emitted from oil and gas exploration and development activities could adversely affect visibility and vegetation within the Park.

All oil and gas operations and facilities must comply with National Ambient Air Quality Standards. In order to ensure that air quality standards are maintained, limitations on nitrogen dioxide, sulfur dioxide, and totalsuspended-particulate matter are imposed on industrial sources under the provisions of the Prevention of Significant Deterioration Program, administered by EPA. ADEC's Air Quality Maintenance program controls significant, stationary sources of air contaminants to protect and enhance air quality and abate impacts on public health and the environment. The agency issues operating permits to existing major facilities incorporating all applicable requirements, and issues construction permits to new large facilities and for expansions of existing facilities. Reasonably foreseeable cumulative effects of this proposed sale on air quality is discussed in Chapter Six.

The sale area appears to include the Clam Gulch SRS and the Captain Cook SRA. Both of these units have received federal assistance through the Land and Water Conservation Fund.	While these recreation areas are within the proposed Cook Inlet Areawide lease sale, surface entry for the purpose of oil and gas development is prohibited (See Plate I).
NPS would like to review subsequent exploration and development plans of operations including post-development reclamation adjacent to the boundaries of the National Parks. NPS would also like to review Prevention of Significant Deterioration permit applications for activities associated with oil and gas.	EPA administers the PSD program. Information on permit applications can be obtained by contacting that agency. The Service's request for notification has been forwarded to the Division of Governmental Coordination. Significant projects in the Coastal Zone will be noticed by DGC.
The Lake Clark Pass area should be excluded from the sale. Oil and gas activities would have a detrimental effect on the visual qualities of the natural landscape.	Should any activity be proposed within Lake Clark Pass, DNR may require that permanent structures be designed to be compatible with the aesthetics of the surrounding area.
NPS would like to participate in the development of mitigation measures for potential adverse effects to the National Park System.	NPS can participate in the best interest finding process by submitting comments and suggestions and by attending public meetings during the 90-day comment period. DO&G welcomes suggestions from NPS for the development of proposed mitigation measures. Please provide specific mitigation measures for consideration in the final finding. NPS may also comment at the plan of operations stage when permits are issued and recommend additional mitigation measures at that time.
An evaluation of the lease sale on subsistence activities should be conducted prior to the lease sale.	This has been done. Cumulative effects of oil and gas activities on subsistence resources and harvesting are discussed in Chapter Six.
State lands within the National Park System should be excluded from lease sales.	No state lands within the National Park System are included in this proposed lease sale.
NPS recommends deferring the area adjacent to Katmai National Park with was affected by the <i>Exxon Valdez</i> spill until the land and resources have recovered to pre-spill conditions. Industry activities could be counterproductive to restoration efforts.	This area is not within the proposed Cook Inlet Areawide lease sale boundary.

Potential bidders should be made aware that the NPS will not authorize oil and gas exploration on federal lands or waters within the boundaries of the National Park System.	There are no national parklands within the sale area.
We recommend the lessee be required to demonstrate the capability to implement an adequate oil spill prevention and contingency plan prior to exploration and resource development, and to comply with federal and state laws and regulations concerning the management of hazardous materials.	Operators must have an approved oil spill contingency plan prior to beginning their operations. Chapter Five and proposed Mitigation Measure 1 contain a description of oil and hazardous substances spill planning requirements.
Spill response equipment should be prepositioned at strategic coastal sites and procedures should be adopted to ensure timely coordination with NPS personnel during a spill.	It is not within DNR's authority to require operators to stockpile spill response equipment. ADEC is the state's oil spill planning and response coordinator. ADEC's regulations require operators to have necessary equipment on hand, to access more equipment through agreements and to describe such equipment and arrangements in their oil spill contingency plans. The industry, with oversight from government agencies and citizens groups, has researched response options for the Cook Inlet area and developed prevention and response strategies based on best available technology. The "Unified Plan," prepared by the ARRT, describes the roles of all agencies who might be affected by an oil spill. The NPS is included in the Incident Command Structure. See Chapter Five, "Specific Issues," on spill prevention and response.
Shoreline monitoring stations should be established at key coastal locations to evaluate clams, mussels and other appropriate species that may be affected by offshore operations.	Please see response to NPS letters, 9/14/94 and 6/15/94.
The least environmentally damaging exploration, development and production technology should be used in areas readily visible from the park.	In the interests of habitat protection, the best technology is used throughout the proposed sale region, regardless of land status.
The potential contamination of aquifers or groundwaters from exploration and development activities should be minimized.	Potential effects of oil and gas activities on surface and groundwater are discussed in Chapter Five.

# United States Department of the Interior, Fish and Wildlife Service, Gary Wheeler, Acting Field Supervisor, 8/21/92

No listed threatened or endangered species for which the Fish and Wildlife Service has authority occur in the proposed sale area. However, the marbled murrelet and the Steller's Eider are both candidate species. The marbled murrelet's breeding habitat extends from the lower Cook Inlet through Shelikof Strait. The lower Cook Inlet and Kachemak Bay is important wintering habitat for the Steller's Eider.

The sale area boundary has changed since first proposed in 1992. It no longer includes Lower Cook Inlet or Shelikof Strait. Information regarding threatened and endangered species has been incorporated into the finding.

The proposed sale area may border federal lands managed by the Kenai National Wildlife Refuge and the Alaska Maritime National Wildlife Refuge. Oil and gas activities adjacent to federal lands may adversely impact refuge habitat, fish, and wildlife because some wildlife populations can exhibit ranges which extend well beyond refuge boundaries.

It is true that many species have ranges that do not recognize man-made boundaries. However, proposed mitigation measures have been developed to provide protection to wildlife resources beyond that afforded by existing law.

Disturbance associated with drilling operations and increased human activities adjacent to the Kenai National Wildlife Refuge may adversely impact waterfowl nesting, feeding, and molting areas. USF&WS recommends that tracts adjoining refuge lands contain provisions which limits certain activities such as surface entry, drilling, exploration, maintenance, and road construction. Restrictions governing aircraft overflights similar to lease terms for tracts in and adjacent to State Game Refuges and Critical Habitat Areas should also be required.

Nearly 40 years of Swanson River oilfield development within the Refuge has had no significant adverse effect on waterfowl. However, the state does recognize that primary waterfowl habitat should be treated with special care. Under proposed measure 6, surface entry will be prohibited on state lands within the Kenai National Wildlife Refuge. Proposed measure 7 states that the siting of new facilities in key wetlands and sensitive habitat areas should be limited to the extent possible. If facilities are to be located within these areas, the lessee should demonstrate to the satisfaction of the director and ADF&G that impacts are minimized through appropriate mitigation measures.

Intermittent noise is known to have adverse impacts on seabirds, particularly murres. USF&WS recommends a one-mile minimum buffer around individual colonies to avoid adverse impacts during the breeding season.

DO&G is currently reviewing information regarding effects of oil and gas activities on murres. Project-specific mitigation measures will be attached to permit approvals if necessary to protect breeding murres from adverse effects.

We suggest that you delete both Iliamna and Iniskin Bays from the lease sale because of the density of seabird colonies. The coastline along Afognak and Kodiak Islands should be deleted because it contains numerous colonies which support more than 80,000 breeding seabirds each year. The Barren Islands could be severely impacted if an oil spill were to occur due to exploratory activities conducted near Afognak and Kodiak Islands. Puale Bay and Middle Cape should also be excluded from consideration.

Since the time this letter was written, all areas mentioned have been removed from the proposed sale area. Oil spill prevention and response are discussed in Chapter Five.

More than 77,000 seabirds inhabit Chisik and Duck Islands during the breeding season. USF&WS recommends that no leasing be allowed to occur within 20 miles of this area. Trumpeter swans are concentrated from the Kenai Peninsula north and use the area for staging and brood rearing. USF&WS recommends a buffer around areas of concentration during nesting and brood-rearing.

Distribution and abundance of seabirds in Cook Inlet is described in Chapter Three.

Considering existing habitat protection laws and proposed mitigation measures, deletion of acreage from leasing is not necessary to protect wildlife. Project-specific mitigation measures will be attached to permit approvals if necessary to protect seabird colonies from adverse effects.

Several key waterfowl habitat areas have been designated by the legislature as refuges or critical habitat areas. For activities occurring within a refuge or critical habitat area, the lessee will be required to obtain permits from both DNR and ADF&G. Five state game refuges (SGR) and four critical habitat areas (CHA) are located within or partially within the proposed sale area (See Plate I). Operations within these refuges must comply with the terms and conditions of the sale, the regulations contained in 5 AAC 95, and the requirements applicable to special area management plans. Proposed measure 23 includes additional restrictions on surface entry, exploration and development within these habitats. This proposed measure states that surface entry will be prohibited within one-quarter mile of trumpeter swan nesting sites between April 1 through August 31, and that permanent facilities will be prohibited within one-quarter mile of known nesting sites. Likewise, for the Tule goose habitat in the Kahiltna, Yentna and Susitna River drainages, proposed measure 22 allows for exploration, development and major

	maintenance only between November 1 and March 31, unless an extension is approved by ADF&G and DO&G. Gravel pads and wellheads are the only above ground structures that will be allowed within the Tule goose habitat.
The proposed sale area is rich with trout and salmon. Review of resources should take into consideration the numerous water systems stocked by F&G as well as native fish populations.	Comment noted. Fish resources of the proposed Cook Inlet Areawide region are described in Chapter Three.
USF&WS recommends that DO&G continue to consult regarding lease tracts bordering national wildlife refuge lands. Lease tracts supporting high value wildlife or fisheries habitat may need to be deleted or have restrictions on activities.	DO&G encourages the Service to remain involved in Lease Sale and Plan of Operations approval processes. Detailed and site- or areaspecific information on wildlife abundance, distribution, and biology is important to managers charged with protecting public resources.
USF&WS recommends for aircraft 1,500 feet vertical and one-mile horizontal buffers especially in sensitive nesting and staging areas.	The state has no authority to restrict aircraft flight patterns, however, proposed Lessee Advisory 4 states that aircraft flying over the Goose Bay SGR and the Palmer Hay Flats SGR, the primary waterfowl habitat within the Susitna Flats SGR and Trading Bay SGR, and the core Tule goose and trumpeter swan molting and nesting corridors in Trading Bay SGR, Redoubt Bay CHA and along the Kahiltna, Susitna, and Yentna rivers, must maintain a minimum altitude of 1,500 feet above ground level or a horizontal distance of one mile from April 1 to October 31. Human safety will take precedence over this provision.
The Kenai Peninsula has an especially dense population of bald eagle nests. USF&WS recommends that DO&G use the same stipulation for bald eagles as was used in Sale 74.	Measure 30 of Sale 74, held in September 1991 contains the same language and intent as proposed measure 24.

### **State Agencies**

Alaska Department of Fish and Game, Habitat and Restoration Division, Lance
Trasky, Regional Supervisor, 7/23/97

ADF&G recommends mitigation measures based on Sales 49, 67A, 74, 76, and 85A with the following additions: Oil and gas activities within the important Tule goose habitat along the Kahiltna, Yentna, and Susitna rivers should be allowed only between November 1 and March 31. In addition, a core Tule goose nesting and molting area lies immediately adjacent to the proposed Sale 85 boundary, along the upper Kahiltna River. If the proposed sale area is reconfigured, ADF&G will recommend no surface entry for the core Tule goose area in the upper Kahiltna River. The rationale for this measure is the status of the population of this subspecies and the importance of these habitats for nesting and molting. The population of Tule geese has always been small, increasing from 4,500 to as many as 7,000 during the early 1990's when they benefited from protection measures for Pacific white-fronted geese.

Adopted, see proposed Mitigation Measure 22.

ADF&G recommends that the siting of facilities be prohibited within one-half mile of important anadromous fish-bearing streams on the Kenai Peninsula. This would be consistent with measures for the west side of Cook Inlet and with recommendations developed by the Sale 85A stakeholders group.

Adopted, see proposed Mitigation Measure 6.

ADF&G supports DNR's efforts to apply lease sale mitigation measures to oil and gas activities in, on, or accessing all leased lands and waterbodies regardless of the ownership status of the land and DO&G's proposed regulation to implement this change. Please give the current status of the proposed regulation.

The amendments to 11 AAC 83.158 and 11 AAC 83.346 became effective February 21, 1998.

# Alaska Department of Fish and Game, Habitat and Restoration Division, Lance Trasky, Regional Supervisor, 9/7/94

A new Tule goose nesting and molting area has been identified along the Kahiltna River. Indications are that a significant percentage of the Tule goose population uses this area. Special consideration should be given to this information in the lease sale planning process

Proposed Lessee Advisory 4 reads as follows:

Aircraft flying over the Goose Bay SGR and the Palmer Hay Flats SGR, the primary waterfowl habitat within the Susitna Flats SGR and Trading Bay SGR, and the core Tule goose and trumpeter swan molting and nesting corridors in Trading Bay SGR, Redoubt Bay CHA and along the Kahiltna, Susitna, and Yentna rivers must maintain a minimum altitude of 1,500 feet above ground level or a horizontal distance of one mile from April 1 to October 31. Human safety will take precedence over this provision.

## Alaska Department of Fish and Game, Habitat and Restoration Division, Lance Trasky, Regional Supervisor, 6/15/94

There are two areas important to the set and drift gill net fishermen: 1) east side marine waters from Anchor Point north to Boulder Point, and 2) nearshore waters in Chinitna Bay extending north to Iliamna Point. The Salmon harvest occurs from approximately mid-June through early September. Under the Alaska Coastal Management Program, these areas must be managed as a fisheries conservation zone. Water dependent uses, such as fishing, must be given priority when planning coastal development. Therefore, exploration activities within these areas should be subject to seasonal restrictions, and development activities should be subject to no surface entry.

This issue was decided by the Alaska Supreme Court in 1996 (Lease Sale 78, Ninilchik Traditional Council, et al v. Noah). The Court wrote:

"[t]he ACMP envisions management of the coastal zone for multiple uses. See AS 46.40.020(4). Multiple use management is inconsistent with simply identifying "conflicts" among uses and then applying a hierarchy of uses to exclude lesser ranking uses; instead, it inherently contemplates harmonizing competing uses whenever possible. AS 46.40.020(4) (providing that management of coastal land and water uses will "generally" give priority to those which are economically or physically dependent on coastal location, thus implying that other uses are not excluded). DNR has done this to the extent it reasonably could at the lease sale stage. It will have to do so again at the exploration and development stages, if they are reached."

The Court found DNR's mitigation measures satisfied the coastal development standard.

The sale area appears to include and be adjacent to the McNeil River State Game Sanctuary. Oil and gas activities that could alter habitat, disturb bears, or detract from the high quality viewing experience of the Sanctuary would be incompatible with the primary purpose for which the Special Area was established. ADF&G recommends that 1) development activities be prohibited within McNeil Cove west of Nordyke Island and 2) exploration activities be prohibited within the Cove between May 16 and August 31.	The McNeil River State Game Sanctuary and Refuge is no longer included in the proposed sale area. The most southern boundary of the proposed areawide sale area is north of Chinitna Bay.
Willow Mountain CHA should be subject to no surface entry in order to be consistent with leasing practices in other relatively small Special Areas.	This Critical Habitat Area is outside of the proposed Cook Inlet Areawide sale boundary.
Development setbacks designed to protect designated anadromous streams should be required on all applicable Sale 85 tracts.	Proposed measure 6 restricts facility siting within river corridors. Additionally, this measure prohibits the siting of onshore facilities, other than roads, docks or pipeline crossings, within 500 feet of all fishbearing streams and lakes.
The Kenai Lowlands Caribou Herd core calving and summering habitat is located within the sale area. Proposed mitigation measures designed to protect these areas should be included in Sale 85.	Proposed Mitigation Measure 25 is designed to minimize impacts on the Kenai Lowlands Caribou Herd:  a. Surface entry within the core caribou calving area is prohibited, except that surface entry for seismic exploration will be allowed from October 16 to March 31.

b. Exploration and development activities will be restricted or prohibited between April 1 and October 15 within the core caribou summer habitat, except that maintenance and operation of production wells will be allowed year-round. Permanent roads, or facilities other than production wells, will also be restricted or prohibited within this area. Facilities within the core caribou summer habitat that required year-round access must be located in forested areas, where practical. \*Exception - ADF&G

c. Pipelines must be buried within the core caribou summer habitat.

## Alaska Department of Fish and Game, Habitat Division, Lance Trasky, Regional Supervisor, 8/27/92

ADF&G believes that it is most appropriate to defer leasing in Shelikof Strait.

Shelikof Strait is no longer in the proposed sale area.

### Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, Neil C. Johannsen, Director, 9/7/94

The area is heavily used for outdoor recreation activities. Some of the park units are administratively created through ILMA or purchase of fee simple title. Willow Creek SRA, Nancy Lake SRA, Chugach State Park, and Captain Cook SRA, and the Kenai River SMA are legislatively designated. In most cases, legislatively-created parks are considered withdrawn from oil and gas leasing. However, directional drilling from outside park unit boundaries would be consistent with the legislative withdrawal. For administratively created parks, there should be no surface entry.

Leasing will be prohibited in state parks units that either have been legislatively created or that have been purchased by the state using federal land and water conservation funds. In a few cases, which should be determined on a case by case basis with local Parks offices, important viewshed areas in direct proximity to parks should be placed off limits to surface entry. Concerned primarily with Captain Cook SRA, Clam Gulch SRS, Ninilchik SRA, and Deep Creek SRA. With reasonable stipulations and mitigation measures, this sale can be conducted while still protecting park values.

Leasing will be prohibited in state parks units that either have been legislatively created or that have been purchased by the state using federal land and water conservation funds. DO&G recognizes the importance of preserving scenic viewsheds and is in agreement with DPOR that this should be considered on a case-by-case basis. This will be done at the plan of operations stage when specific areas and projects for exploration and development have been identified. DO&G looks forward to working with DPOR to assure that facilities are sited so that they have the least impact on viewsheds.

### Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation, Neil C. Johannsen, Director, 6/15/94

Legislatively created parks are considered withdrawn from multiple purpose uses. However, directional subsurface entry might be consistent with the legislative withdrawal. For administratively created parks, there should be no surface entry. In a few cases, which should be determined on a case by case basis with local Parks offices, important viewshed areas in direct proximity to parks should be placed off limits to surface entry. Concerned primarily with Captain Cook SRA, Clam Gulch SRS, Ninilchik SRA, and Deep Creek SRA. With reasonable stipulations and mitigation measures, this sale can be conducted while still protecting park values.

See response above.

#### Alaska Department of Labor, Charles W. Mahlen, Commissioner, 2/16/94

In response to request for socioeconomic information, enclosed are 1992 population estimates and information on employment by industry in 1992.

This input is appreciated. DO&G encourages ADOL to review the socio-economic information contained in this document, specifically Chapter Four. ADOL is also encouraged to submit any additional facts on population, employment, income, earnings, wages, or other relevant data for consideration.

#### **Local Governments**

Chickaloon	Village,	Alan	Larson,	1/15/9	4

Oil and gas development is an unsafe practice and other forms of energy resources be developed. According to the *Anchorage Daily News* of 12/31/93, the amount of oil spilled on the North Slope during normal drilling operations are measured in thousands of gallons. This is unacceptable.

DO&G reviewed the *Anchorage Daily News* article and it is true that 1993 was an exceptionally bad year for oil spills on the North Slope. A review of ADEC's spill database shows there were 45 spills over five gallons that year. The amount of crude oil spilled was 99,388 gallons. According to ADEC, industry has made substantial progress toward reducing spills on the North Slope. In 1994 there were 31 spills over five gallons with a total of 20,764 gallons of crude oil spilled. There is always some risk that a spill could result from exploration, production, storage, or transportation of oil. The state's policy is to stress prevention, and to minimize the likelihood for spills of any size. It is also the state's policy to improve the ability to respond to spills when they happen. Proposed mitigation measure 8 requires impermeable lining, diking or equivalent measures for onshore oil storage facilities. Proposed measure 10c requires pipelines and construction pads be designed to facilitate the containment and cleanup of spilled hydrocarbons. See Chapter Five on oil spill prevention and response.

#### City of Chignik, Donald Braun, 12/29/93

It is difficult to determine how close the sale area is to the city.

All acreage in the vicinity of Chignik has been deleted.

#### City of Kenai, John Williams, 1/6/94

Submits a resolution by the city council in support of Sale 85.

#### City of Wasilla, John C. Stein, Mayor, 8/18/94

The City of Wasilla generally supports the responsible development of Alaska's oil and gas resources.

DNR has endeavored to provide for the responsible development of Alaska's petroleum resources and looks forward to Wasilla's continued involvement in the lease sale process.

#### Kenai Peninsula Borough, Harriet Wegner, 8/18/92

Lease tracts in Shelikof Strait and Kamishak Bay will necessitate additional information in the finding Shelikof Strait and Kamishak Bay are no longer in the sale area.

In the ACMP analysis, add information in narrative to identify this KPBCMP policy as summarized below:	This information has been included in the ACMP analysis.
Geophysical Surveys:	
a) located, designed and conducted in a manner so as to avoid disturbances to fish and wildlife populations, habitat, and harvests.	
b) use of energy sources that have been demonstrated to be harmless to fish and wildlife and human uses of fish and wildlife.	
c) avoid significant interference with commercial fishing activities.	
Access. On the term which restricts lease related use, add sport fishing and recreational users to subsistence and commercial fishing.	Sport fishing and recreational use have not been included in this term. The proposed activity must comply with the, coastal zone consistency review standards and other state or federal agency authorizations or permits. At the plan of operations stage potential impacts can be assessed and, if necessary, additional protective measures can be implemented.
Local Hire. Incorporate in the local hire clause used in Sale 67A and 74 which included "local" residents" and "to recruit employees from communities in the vicinity of the leased area."	This has been adopted.
The Port Graham/Nanwalek Area Which Merits Special Attention Plan was approved in March, 1992. Oil spill emergency preparedness and response is addressed in this plan with specific policy in 13.0 Air, Land and Water Quality. As proposed, no lease tracts are located in or adjacent to this AMSA. If the lease area is expanded, applicable elements of this AMSA should be incorporated into the Findings.	Port Graham and Nanwalek are no longer in the proposed sale area.

The Kasilof River Area Which Merits Special Attention is in the draft public review stage. It is anticipated that this plan will advance to Public Review in September, 1992 with anticipated approval in Spring, 1993. Administrative policy A8, within the plan addresses deletion of oil and gas lease tracts which have the potential for adverse impacts.

The Kasilof River AMSA is still a preliminary draft plan. It has not been approved by the Coastal Policy Council. Currently there is no funding to complete the plan and gain approval.

#### Kodiak Island Borough, Jerome M. Selby, Mayor, 6/14/94

Concerned about the lack of detail in the map accompanying the call for comments.

The initial call for comments is of a general nature. Please see the response for Issue 7.

It is important that a proposed sale schedule with significant milestones be made available to the public so that the public will be able to anticipate opportunities for involvement in the sale process and so that the public will better understand the process used to evaluate the sale.

DNR makes every effort within the limitations of our budget to distribute the necessary information to the public. Please see the response for Issue 8. The Five-Year Leasing Program and all notices contain lists of opportunities for comment and explanations of the leasing process.

Sale 85 appears to be adjacent to federal OCS Sale 149. DNR should keep the current comment period open until the federal EIS for Sale 149 has been made available to the public. The EIS is a resource that the state should take into consideration in the decision process for Sale 85.

DNR used the EIS for OCS Sale 149 as an information resource for this Finding. The comment period for the notice you responded to was dictated by the sale schedule. MMS conducted the sale on June 11, 1997, and DNR has reviewed the results in connection with this proposed areawide lease sale.

A public hearing should be held in Kodiak and times so that representatives of the commercial fishing industry may attend. It is important that the Division Director be one of DNR's representatives at the public hearing. Decision makers often miss this type of opportunity to understand public concerns.

The boundaries for the proposed Cook Inlet Areawide Lease Sale are now far to the north of Kodiak. The lease sale should result in no impacts to the Kodiak area. Please see the response to Issue 8.

Concerned about the possible impact of oil and gas exploration and development on low energy coastlines, specifically saltwater estuaries. The productive capacity of these areas so critical to our region should not be put at risk.

The effects of oil and gas activities on the environment are discussed in Chapters Five and Six. DNR employs mitigation measures to protect sensitive areas. Mitigation measures and other restrictions will be imposed as necessary following interagency discussion and public input. Proposed mitigation measures in Chapter Nine regarding wastewater, waste disposal,

wetlands and stream protection, and special areas apply to nearshore coastal waterbodies in the proposed sale area. For example, proposed Mitigation Measure 19 prohibits the disposal of produced waters into fresh waterbodies, intertidal areas, and estuarine waters.

#### Kodiak Island Borough, Linda Freed, 9/14/92

Sale 85 should be delayed until: 1) The long-term impacts of the Exxon Valdez oil spill are established and can be used as a basis for implementing mitigation measures. 2) Regulations are implemented to protect coastal habitats from toxic drilling muds. 3) Regulations are implemented to reduce or eliminate conflicts between the oil industry and fishing (e.g. seasonal restrictions). 4) The industry proves it is capable and willing to cleanup the maximum projected oil spill that could occur.

It is not in the best interests of the state to delay the Preliminary Finding for the proposed Cook Inlet Areawide Lease Sale. Mitigation measures and local, state and federal ordinances, statutes and regulations provide sufficient protection for the environmentally responsible and economically feasible development of the state's oil and gas resources.

- 1) The long-term impacts of the Exxon Valdez oil spill continue to be studied. ADNR staff reviewed and considered the latest data during preparation of the preliminary best interest finding.
- 2) The discharge of drilling muds is regulated by the NPDES permit issued by EPA. In addition, the state advocates the injection of drilling muds and cuttings.
- 3) Conflicts between fishing and oil industry activities are best resolved through the negotiation of possible operational restrictions during the development of the plan of operations when the location and nature of the activity is known.
- 4) State and federal laws mandate regular testing of the oil spill contingency plans that operators are required to prepare. ADEC, the US Coast Guard (offshore) and the US EPA (onshore) must review and approve c-plans before operations may begin and must monitor exercises and drills of the c-plans.

#### Lake and Peninsula Borough, Walt Wrede, Borough Manager, 6/15/94

Pleased that the Shelikof Strait area has been dropped from the proposed sale area. The communities in the Lake and Peninsula Borough that could be most affected by exploration and development activities are located on the east side of the Alaska Peninsula. The residents of Chignik, Chignik Lake, Chignik Lagoon, Ivanof Bay, and Perryville depend mostly on commercial fishing for their livelihoods.

Commercial fishing is discussed in Chapters Four and Five. The proposed areawide lease sale area is located far to the north of the Lake and Peninsula Borough. Your area should experience no impact from the lease sale.

Economically, sockeye salmon represent the most important commercial species in the Chignik fishing district. The 1993 total exvessel value of the salmon harvest for the Chignik fishing district was \$9.9 million. The borough received close to \$200,000 in revenue from the 2% borough tax on raw fish.

See the previous response.

The economic and resource values of the Chignik fishery should be discussed in the preliminary finding on the proposed lease sale. Applicable resource and socioeconomic information from the EIS for OCS Sale 149 should also be incorporated.

See the previous response. The Chignik fishery area is no longer included in the proposed sale area.

A more detailed description of the state's process for evaluating lease sales and schedule of various stages at which the public will have the opportunity to comment.

Chapter 11, Conclusion and Request for Comments, contains information regarding future comment opportunities for this proposed lease sale.

#### Matanuska-Susitna Borough, Mary Martin, 7/31/97

Submits resolutions of the Borough Assembly in support of the sale provided it complies with the MSBCMP, the Susitna Area and Willow Sub-basin plans, and applicable state land management plans. Requests that DO&G consult the cities of Houston and Wasilla and the community councils affected by the sale and avoid the proposed Point MacKenzie port area.. Recommends that DO&G conduct a public hearing in the Lake Louise area at the appropriate stage of the sales development to hear the concerns of the local population.

ADNR has analyzed the MSBCMP and has determined that with the mitigation measures and lessee advisories proposed, the Cook Inlet Areawide sale complies with the program. The sale also complies with the Susitna Area and Willow Sub-basin plans and applicable state land management plans. Houston and Wasilla are on the Cook Inlet lease sale mailing list and will receive copies of all materials related to the sale, as will any community councils that have asked to be on the mailing list. A public meeting regarding this sale will be held on April 29,

1998, at 7:00 p.m. in the Mat-Su Borough Assembly Chamber, 350 E. Dahlia Drive in Palmer. The Lake Louise area is not within or near the Cook Inlet Areawide sale boundaries; thus DO&G does not plan to conduct a public meeting there. The request that the Point McKenzie port area be avoided will be forwarded to DO&G's permitting unit, so that your request may be considered at the time plan of operations permits are approved.

### **Industry**

#### Anadarko, Todd L. Liebl, 7/24/97

Anadarko believes that areawide leasing is instrumental to increasing the economic attractiveness of investing in Alaska by the independent sector of the petroleum industry. Sale 85 has the potential to attract a larger number of bids from a broader array of companies and individuals. Consequently a greater number of leases will be awarded resulting in an increase in exploration and development activity.

Comment noted.

DO&G is encouraged to consider reasonable and adequate lease stipulations in order to adequately protect sensitive areas rather than the option of excluding areas from the sale.

Proposed mitigation measures have been designed to provide protection for sensitive areas so that it will not be necessary to delete areas from the sale area.

#### Phillips Petroleum Company, Brett A. Butterfield, Land Specialist, 6/15/94

Phillips has a medium to high level of interest in the areas offered for lease at this sale and supports efforts to maintain a timely and regular schedule of lease sales. A regular schedule affords the oil and gas industry the opportunity to plan its participation in exploration.

DO&G believes a regular lease sale schedule benefits all concerned parties.

Phillips feels strongly that petroleum reserves can be developed while preserving the natural environment of Alaska. Past industry operations in Cook Inlet have proven that with current laws, lease stipulations, and industry practices, development can occur in this area with minimal impact on the environment. Comment noted. See Chapter Six, "Cumulative Effects," for a discussion of environmental impacts.

Oil and gas activities have a positive social and economic impact with increased employment and an enlarged tax base. Comment noted. See Chapter Six, "Cumulative Effects," for a discussion of fiscal effects.

#### Phillips Petroleum Company, Brett A. Butterfield, 8/17/92

Phillips supports efforts to maintain a timely and regular schedule. DO&G should continue its efforts to protect the environment and work with those who feel the oil and gas activities are detrimental. There is a necessity to find and develop domestic petroleum reserves and Phillips feels strongly that this can be accomplished while preserving the environment.

DO&G continues to work with other agencies and organizations to develop proposed mitigation measures that allow for oil and as activities, while at the same time helping to preserve the environment..

#### Rubicon Petroleum, LLC, Bruce I. Clardy, President, 6/6/94

Rubicon requests that DNR reconsider the timing of the proposed lease schedule. DNR should include a Cook Inlet areawide sale in 1995 in order for industry not to lose momentum and to provide investment opportunities for independents. As large oil fields decline, major oil companies reach a point when revenues after expenses no longer provide an adequate return on the investment. These companies then look for more attractive investments elsewhere.

Interest in Cook Inlet is why DO&G decided to include Sale 85A in the leasing schedule, after the department delayed this areawide sale (formerly, Sale 85).

Rubicon intends to become a producer of natural gas and oil initially in the Cook Inlet basin, and ultimately elsewhere in the state. Independents need opportunities to extend their investments into exploration and extension areas, either in partnership with major oil companies or on their own.

Annual areawide lease sales, exploration licensing and shallow gas leasing provide added opportunities for independents.

# Marathon Oil Company, S. Douglas Robbins, Oil and Gas Exploitation Manager, 9/2/94

Marathon is interested only in Cook Inlet at this time. Annual area-wide lease sales in the Cook Inlet basin. Marathon has a long-term interest in producing oil and gas in Alaska. A reliable and timely schedule of lease sales is necessary for Marathon's business. When lease offerings are less frequent than once a year, it is difficult to sustain an

The Five-Year Leasing Program proposes annual areawide Cook Inlet sales beginning in 1999.

exploration program. The investments in staffing and seismic do not yield a return when prospects are waiting for acreage to be offered for lease			
Oil and gas production has occurred in Cook Inlet and the Kenai Peninsula for the last 30 years with negligible impact on the environment. According to USGS, the bulk of future reserves growth in the basin is likely to be in natural gas. This natural gas will support local utilities, industrial use, export base, employment, and attract new industry.	Comment noted.		
ARCO Alaska, Inc., James M. Davis, Senior Vice President, 8/21/92			
ARCO supports a firm lease sale schedule with sales being held on a timely basis. Availability of acreage is essential to continued exploration in Alaska.	See above response to Marathon		
It is vital for the state to maintain an orderly lease sale process and reasonable lease stipulations if the state is to continue attracting private investment for development.	DO&G works closely with other agencies and organizations to develop reasonable, but effective, mitigation measures.		
It is important that lease stipulations maintain a balance between environmental values and the oil and gas industry needs. ARCO is concerned about the trend toward restrictive lease stipulations and plan of operations permits and feels that future decisions should acknowledge that oil and gas exploration and production have successfully co-existed with Alaska's environmental values and other uses for over 30 years.	Comment noted.		

### **Organizations**

Alaska Marine Conservation Council, Dorothy Childers, Executive Director, 7/28/97		
The Marine Conservation Council opposes offshore oil and gas lease sales in Cook Inlet because of the risk to sensitive habitats and our marine and coastal resources.	Comment noted. See response to Issue 4. In addition to existing law, proposed lease sale mitigation measures have been developed to ensure that resources are protected.	

The area is too large. An adequate best interest finding cannot be conducted on an area as large and complex as Lease Sale 85. A single finding will not be able to examine the required range of issues in enough depth to be meaningful or useful. One finding to cover the entire Cool Inlet watershed that will stretch over 10 years cannot possibly consider the impact in a reasonable degree of detail. Can DO&G assess the cumulative impacts on habitats, fish and wildlife, the finishing industry, and subsistence in a single, one-time document?

See response to Issue 1. The statutory requirements for a best interest finding are discussed in Chapter One.

The agency will not revisit the finding during the next 10 years unless substantial new information is brought forward. Marine Conservation Council is not confident that any information will meet the criteria to justify revising the best interest finding.

The public will have an opportunity prior to each subsequent areawide lease sale to offer new information that might result in a supplement to this finding. It is difficult to predict what new information might justify a supplement, but the commissioner will carefully consider the comments received when making this decision.

The maps are misleading. The maps include areas that the state does not have authority to lease. They also include areas in which the industry is not interested. DO&G should eliminate the areas from the lease sale map which the state cannot lease and the areas of little or no industry interest.

See response to Issues 7 and 9.

The process is confusing to the public. The general public is unaware of the sale or is confused between Sales 85, 85A, and Sale 85A-W. The division is proposing areawide Sale 85 to follow Sales 85A and 85A-W which contains the same areas again plus additions of other river systems and uplands throughout the Cook Inlet watershed. Also Sale 85A-W is at a different phase in the prelease process than the areawide sale. The public is expected to respond to two sales of overlapping areas at the same time.

Sale 85-AW was held February 24 1998. DO&G agrees that having three sales with similar numbers can be confusing. Annual leasing eliminates the numbering system and the need for exempt sales (labeled "A" or "AW", depending on the appropriate statute). See Chapter One for a description of the Areawide leasing process.

Proposed Sale 85 contains numerous sensitive areas unsuitable for oil and gas development. Sensitive areas such as designated critical habitat areas, anadromous fish streams, important commercial and subsistence fishing grounds, wildlife refuges, wetlands, and private property should be removed from the proposed sale area. The Marine Conservation Council does not accept the division's assumption that mitigation measures can protect these areas from harm.

Surface entry is prohibited or restricted in Critical Habitat Areas, State game Refuges, parks and recreation areas (See Plate I). Proposed mitigation measures establish facility siting buffers around fishbearing streams and lakes, and facilities couldn't be sited within 1/2 mile of major rivers. Additional measures designed to protect subsistence and commercial fishing will be strictly enforced (See Chapter Nine). Most landowners do not own the subsurface mineral estate beneath their property, however rules exist to protect private property rights (See Issue 2). During this comment period, DO&G encourages the Council to provide additional information and evidence to illuminate past or existing conflicts between subsistence or commercial fish harvesting.

DO&G is not required to hold this sale in its current configuration or at all. The areawide approach is discretionary. The public process established for this areawide sale is unacceptable. The public should be allowed an opportunity to comment on proposals which are more specific and for which a best interest finding can be a more useful product. A process which commits DO&G to lease 10 years into the future without resolution of conflicts is a poor way to manage our natural resources.

See response to Issues 1 and 8. The areawide lease process is described in Chapter One, and is discretionary. However, during the current legislative session the Alaska Senate passed a resolution (SCR 20) in support of areawide leasing. Annual 60-day comment periods will precede subsequent sale offerings. The opportunity for public involvement is expanded with areawide leasing. While best interest findings are not required for specific proposals, plans of operations are. These plans are reviewed by the appropriate agencies and, depending on the proposal, property owners in the immediate vicinity will be notified, and have an opportunity to provide input.

### Alaska Waveriders, Mike Macy, Director for Public Policy, 7/28/97

The lease sale area is too large. The state lacks either the resources to determine which leaseholders are failing to fulfill their obligations to develop their leases or the will-power to force compliance. Examples are Prudhoe Bay and Point Thomson. Areawide leasing will only exacerbate this problem.

See response to Issue 1. The state has the resources to determine if leaseholders are fulfilling their obligation to develop their leases. Leases are issued for a finite term. If lessees fail to initiate production within the period of the term, the leases revert to the state. If the lease is within a unit, the unit is subject to a plan of development, which must be approved annually. Development is moving forward at Point Thompson with the Sourdough prospect and the working interest owners are in discussions with

	the state for further development. Prudhoe Bay has already seen extensive development and industry is in the process of developing satellite fields.
Sale 85 jeopardizes the rights of property owners. Drilling rigs should not have the right to enter and operate on private property without compensating the owner of the surface estate. Currently, lease sale 85 constitutes a taking. Oil and gas activities should be prohibited in areas where they are in conflict with surface values, activities, and uses including lands and waters important for recreational activities and fish and wildlife habitat.	Concerning rights of property owners, see response to Issue 2. Proposed mitigation measures have been developed to minimize or eliminate conflicts with recreation activities and habitat.
Lease Sale 85 makes oil and gas exploration the number one priority over all other land and water uses. Leasing should be carefully weighed on a tract by tract basis, with the tract's biological and ecological importance given the first priority.	See response to Issue 4.
Lease Sale 85 will effectively flood the market with tract offerings, driving down the value of individual leases, in direct contradiction of the state Constitution that requires that the state's resources be developed in such a way that maximizes their value and benefit.	DO&G disagrees that the number of tracts offered plays a significant if any role in the bid price of an individual tract or in the value of the lease. The price a potential bidder is willing to pay for a particular tract is not a function of the number of tracts offered, but a function of the attributes of the tract such as geologic properties and proximity to existing infrastructure. Potential bidders conduct a decision analysis prior to the sale, which estimates the value of a particular tract. It is unlikely that this analysis would consider the total number of tracts or acreage being offered when valuing any particular tract. The number of tracts offered is independent of tract bid price.

Alaska Waveriders is not reassured by the state's references to directional drilling as a panacea for potential conflicts between oil and gas activities and other uses and values. Drilling should be prohibited within ½-half mile of important estuaries and Cook Inlet. Drilling should also be prohibited within 1 mile of anadromous fish streams.

See response to Issue 6. Proposed Mitigation Measure 6 prohibits the siting of facilities (including drill rigs) within ½-mile of major rivers in the area and within 500 feet of other fish-bearing streams.

The comment period should remain open until October 31, 1997. The state should not schedule comments during the height of the commercial, subsistence, and sport fishing season.

The comment period lasted six months (January 28 to July 28, 1997). Additionally, there was a stakeholder process in September and October. The Commissioner convened a group of 11 Alaskans representing private landowners, environmental groups, tourism, oil and gas and support industry, Native corporations, tribal councils, commercial fishing, and sport fishing. Each stakeholder meeting included a public hearing. Meetings were held in Wasilla, Anchorage, Soldotna, and Homer. The state makes every attempt to allow citizens ample time to comment outside of the commercial, subsistence, and sport fishing season. Following the release of this preliminary finding there will be an additional 90-day comment period. The public is encouraged to get their comments in early to avoid conflicts with the busy summer season.

#### Trustees for Alaska, Stacey Marz, Cook Inlet Issues Coordinator, 7/28/97

DO&G should provide public notice of this sale at all stages of the process, especially considering the enormous area this sale covers and the potential impact it will have on sixty percent of the state's population. The division should provide the public with adequate notice at each step, not just after it drafts the preliminary and final best interest findings.

For annual leasing in Cook Inlet, a 60-day comment period will be held each year beginning in November. Regarding public notification of permit applications under review by the Department and opportunity to comment, see Chapter One.

DO&G has not held any public meetings requesting information about the sale area, or notified anyone not already on its mailing list as a result of previous comments on other sales.

This is not correct, DO&G has involved the public throughout the process. The history of public involvement preceding this preliminary best interest finding is described in Chapter One.

The 4.2 million-acre proposed sale area is too large and diverse to adequately consider in one best interest finding all the issues and impacts facing specific areas within the larger area. It seems impossible to give adequate scrutiny to the requirements of AS 38.05.035(e) and (g) in one best interest finding over such a large area, especially impacts to river corridors, anadromous fish streams, wetlands, critical habitat areas, private surface owner properties, wildlife refuges, fish and wildlife populations and habitats, foreseeable effects on tourism and commercial fishing economies and human uses, and all the affected municipalities and communities.

See response to Issue 1. It will be helpful for Trustees to identify specific areas it believes have not received adequate review so the ADNR may consider them.

The maps are inadequate. The two separate maps are at different scales. Combining both maps into one map would allow the public to view the entire proposed sale area to get the big picture. The maps do not contain enough detail for the public to adequately comment. Only the names of towns and municipalities and major rivers and streams are currently on the maps. The maps should include state parks, state wildlife refuges, state critical habitat areas, federal reservations, national forests, municipal or town boundaries, and other information such as mountain ranges and volcanoes. They should also show lands owned by native corporations and the Mental Health Trust. The map should not include land which the state does not own subsurface rights such as federal reservations.

See response to Issue 7. See Plate I.

Industry has yet to comply with the Governor's directive. Governor Knowles, after the Sale 85A stake holder process, directed AOGA to identify areas of no industry interest. These areas could then be deleted from the Cook Inlet Areawide Sale. The purpose of the governor's directive was to avoid needlessly burdening the public commenting on areas which the industry does not want to develop. As of this time, AOGA has not followed Governor Knowles' directive. DNR is not living up to its trust responsibilities to the citizens to ensure that the industry is doing what the governor directed.

Regarding implementation of the stakeholder's recommendations, see response to Issue 9. Regarding public participation in areawide lease sales, see response to Issue 8.

Including all unleased acreage annually for ten years effectively makes oil and gas activities the priority use in the Cook Inlet Basin, over the thriving sustainable tourism, and commercial and sport fishing. See response to Issue 4. ADNR carefully considered whether oil and gas activities are incompatible with fishing, recreation and tourism, although some temporary displacement or disturbances could occur. Excluding oil and gas from the public domain in effect creates an exclusive right for other uses, which would violate the Alaska Constitution.

It is the position of DO&G that it will not delete areas from the sale because all impacts can be mitigated. It is unreasonable to maintain such an absolute position in all areas and situations. There is no way to mitigate the visual impacts of infrastructure in a natural area on wilderness and recreational tourism

Based on review of information available at this time, and considering all identified resource values and uses of the proposed sale area, and measures to balance protection of the environment with uses. ADNR determined that deletions are not necessary at the lease sale phase. Project-specific mitigation measures will be attached to permit approvals if necessary to protect seabird colonies from adverse effects. Prohibitions on surface entry and restrictions on operation and facility siting in sensitive areas are identified in Chapter Nine. Effects and mitigation strategies of oil and gas activities on aesthetic resources are discussed in Chapter Five. Leasing will be prohibited in state parks units that either have been legislatively created or that have been purchased by the state using federal land and water conservation funds.

Several key wildlife habitat areas have been designated by the legislature as refuges or critical habitat areas. For activities occurring within a refuge or critical habitat area, the lessee will be required to obtain permits from both DNR and ADF&G. Five state game refuges (SGR) and four critical habitat areas (CHA) are located within or partially within the proposed sale area (See Plate I). Operations within these refuges must comply with the terms and conditions of the sale, the regulations contained in 5 AAC 95, and the requirements applicable to special area management plans. Proposed measure 21 includes additional restrictions on surface entry, exploration and development within these habitats. Proposed Lessee Advisory 6 states that in populated areas where there is no local planning and zoning, DNR may require in approval of plans of operation that permanent structures be designed to be compatible with the aesthetics of the surrounding area. Need for the sale is not justified. Areawide Please see response to Issue 5. Areawide sales sales are not mandated by law. It is within the are not mandated by law, however, the State commissioner's discretion to alter the sale Senate has passed a resolution (SCR 20) in area or even to cancel the sale. support of areawide sales. The following suggestions will help alleviate DO&G has evaluated these areas for their some of the previously mentioned concerns: suitability for leasing. See response to Issue 1. Individual best interest findings would be less useful as planning tools compared to this a. The division should evaluate special areas comprehensive areawide finding. DNR Area such as, major river corridors, anadromous Plans contemplate suitable uses for state lands. fish streams, critical habitat areas, wildlife Through this document, DO&G requests the refuges, wetlands, areas of heavy private public to comment on this lease sale proposal surface owner concentrations, and the and submit any information about the region's Municipality of Anchorage, to determine their resources and human uses. suitability for leasing. Any sensitive or controversial areas which the division decides to lease should be deleted from Sale 85 and offered only after individual best interest findings are written which can devote the time and effort necessary to develop particularized mitigation measures and otherwise adequately respond to public comments.

b. Leases should include non-surface occupancy requirements where ever possible, especially on private land.	See Plate I for identification of surface entry prohibitions. See response to Issue 2.
c. Better maps should be provided to citizens. These maps should include the actual areas in which the state possesses the subsurface rights, and exclude the area which industry is not interested in, identify geological formations, state and federally designated areas, and municipal and town boundaries. If this is not possible than a detailed list of the above should be included in all documents available for comment.	See response to Issue 7. For identification of subsurface ownership owned by the state, see Plate I. Geology of the region is described in Chapter Two.
d. All mitigation measures should contain language that mandates specific action from lessees, not non-obligatory language such as "wherever possible," "to the extent they are available and qualified, the lessee is encouraged," and "lessees are encouraged to prepare."	Proposed lease sale mitigation measures must be worded specific enough so the intent or purpose of the measure is preserved, but flexible enough to accommodate change. These proposed mitigation measures as written give the state flexibility to consider alternatives at future permitting phases. DNR may include new mitigation measures at the time it reviews lease plans of exploration, operation, or development.
e. Public notice should be provided along every step of the process in an areawide sale when it requests comments, through media intended to reach the largest audience.	This public process is ongoing. For a discussion of the public notification process for permit applications that are under review by the Department, and the public's opportunity to comment, see Chapter One.
f. The division should cancel Sale 85A-W to help alleviate the public's confusion of two sales with similar numbers with different processes at the same time, and relieve the public's burden of continually commenting on multiple lease sales in the same area.	Sale 85-AW was held February 24 1998. Annual leasing eliminates the numbering system and reduces confusion among the public. See Chapter One for a description of the areawide leasing process.
Oilwatch Alaska, Jim Sykes, Executive	Director, 7/28/97
Oilwatch Alaska opposes Sale 85 Areawide and requests that the best interest finding be delayed at least one year.	No reason or explanation for why the finding should be delayed has been provided. DO&G believes it would not be in the state's best interest to delay the preliminary finding.

The lease sale area is too large. There is no meaningful opportunity for public input once an areawide sale is open. The entire area becomes available every year holding area residents hostage to trust industry and government in the absence of public process. The industry drives the entire process from saying where it is interested to suggesting minimum bids. The detailed description required by AS 38.05.035 in a best interest finding is lacking. It cannot be completed for a sale area so large as 4.2 million acres. An analysis of transportation methods and foreseeable effects on human activities, urban areas, fish and wildlife will involve years of studies for an area this size. A finding will not meet state legal requirements, nor those of the Susitna Area Plan, or KPBCMP.

See response to Issue 1 regarding the size of the proposed lease sale area. Public input opportunities are not diminished in the areawide leasing process. In fact, the process becomes more predictable for those wishing to comment on future offerings. Areawide leasing will provide an established time each year that the state will offer for lease all available acreage within a geographic region. Prior to each sale, DNR must solicit any new information that is available, determine if it necessitates a revision to the finding, and issue either a revised finding or a finding of no new information. The finding prepared for the proposed Cook Inlet Areawide Lease Sale follows the requirements set forth in AS 38.05.035, and the coastal zone consistency determination analyzes the sale's compliance with the coastal management programs of the Matanuska-Susitna Borough, the Municipality of Anchorage and the Kenai Peninsula Borough. DNR prepared the Susitna Area Plan to facilitate the multiple use of the state's resources. The Cook Inlet Areawide Lease Sale is compatible with the goals and principles of the plan. Please see the response for issue 4. As to industry's involvement in the process, it's only logical to offer for lease areas in which industry has expressed an interest. Minimum bids, however, are decided by the commissioner following a resource and economic evaluation by the DO&G staff. Industry has no input into this decision.

Lack of adequate public notice. DO&G has not held any public meetings requesting information and data about the proposed sale area. Although the comment period was not officially extended, public comments were accepted until the end of the stakeholder process.

See the response for Issue 8 and the response immediately preceding this one.

Need for the sale is not justified. The commissioner has the discretion to change or withdraw this sale, which is not mandated by law. There is no demonstrated need to proceed nor is there an obligation to find the sale in the state's best interest. Interest in both state and federal Cook Inlet leases has been minimal. Opening up even larger tracts may lead to less of a return on development of our natural resources. The questions that should be answered are: 1) Is it needed? 2) Is it economically feasible? 3) Are those most affected by it supportive? 4) Is it environmentally safe? 5) Who benefits most?

Please see the response for issue 5 and Chapters 8, 9 and 11 for information regarding the economic benefits to be gained by conducting the proposed lease sale and for proposed mitigation measures and agency regulatory programs that provide protection for the environment. DO&G disagrees that the number of tracts offered plays a role in the bid price of an individual tract or in the value of the lease or will affect the return on development of public resources. The price a potential bidder is willing to pay for a particular tract is not a function of the number of tracts offered, but a function of the attributes of the tract such as geologic properties and proximity to existing infrastructure. Potential bidders conduct a decision analysis prior to the sale which estimates the value of a particular tract. The number of tracts offered is independent of tract bid price. It would not be reasonable for a company to lower bid offerings simply because there are many other choices available. Interest in state Cook Inlet sales has been anything but minimal. The two most recent sales have brought in nearly \$4 million in bonus bids, with nine companies submitting bids.

Areas included are not available for lease. Military reservations, parklands, regional corporation lands, and urban areas are included in the map where the state has no legal authority to lease. The public should have a realistic idea that includes familiar landmarks. No accurate single map of entire Sale area was available. The map that was available was in two parts in different scales. It is difficult to identify environmentally sensitive areas and other areas deserving of special attention. If there can be impacts in or near areas of high public use, the public should have the right to meaningful participation.

DNR has prepared extensive maps to assist residents in locating their property in relation to the proposed sale area. Notices have been quite clear that not all of the area shown on the maps in the notices is available for leasing.

Sale 85 effectively gives priority to oil and gas leasing over all other land and water uses. Many reject the state's position that it can mitigate all use conflicts with fishing, hunting, recreation, subsistence, wilderness, wildlife and wetland protection. It is not necessarily reasonable to develop in certain places even if there's oil there.

Governor's directive remains undone.
Governor Knowles, after the Sale 85A stakeholder process, directed AOGA to

See response to Issue 4.

Governor's directive remains undone. Governor Knowles, after the Sale 85A stakeholder process, directed AOGA to identify areas of low or no industry interest. These areas could then be deleted from the Cook Inlet Areawide Sale. The intent of the governor's directive was to avoid burdening the public from commenting on areas which the industry does not want to develop. It is irresponsible to proceed until the areas of no interest are identified. If industry can ignore this directive, it will confirm that the public process in oil and gas leasing is merely a charade.

See response to Issue 9.

Confusion with similarly numbered lease sales occurring at the same time. Both Lease sale 85A-W and Lease Sale 85 Areawide are being offered at the same time under completely different conditions and programs. Since Sale 85A-W is being offered, Sale 85 Areawide should be delayed to be designed and implemented responsibly.

Sale 85A-W and the proposed Cook Inlet Areawide Lease Sale are offered under similar conditions and are part of the same program. The preliminary finding is a critical step in the determination as to whether or not the sale, as proposed, is in the state's best interests. Delaying it would serve no purpose. The comments received on this finding will help ensure that the sale is designed and implemented responsibly.

Absence of meaningful setbacks. Meaningful mitigation measures must include setbacks from the floodplains of sensitive river systems, rather than simply setbacks from the river banks.

The intent of proposed river, stream and lake buffers is to protect the riparian zone. All proposed setbacks are as large and often greater than riparian zones. The definition of a riparian zone varies depending on its usage, but generally refers to the zone between wetlands and uplands. One-half mile and 500 feet are easily understood and clearly defined distances that operators can plan activities around. The issue of setbacks from the 100-year floodplain was raised during the stakeholders process for this areawide sale. The group failed to reach a

	consensus on this proposal and it was not adopted. Even with the heavy flooding on the Kenai River in 1995, DO&G is unaware of any damage to oil and gas facilities that would warrant increasing setbacks to include the entire floodplain of river systems. Proper citing and engineering of oil and gas facilities will minimize the detrimental effects of flooding and other geophysical hazards. See Chapter Five "Geophysical Hazards."
Citizen oversight needed. With the decline of agency resources, it is critical that citizens and groups obtain the necessary financial support to effectively monitor oil and gas operations. There needs to be objective, third-party oversight.	ADNR agrees that funding is critical to the success of citizen groups. Funding sources include organizations, industry, local government, and federal grant money. For example, the Cook Inlet Keeper organization is funded by fines levied on Cook Inlet industry operators for violations of EPA permit requirements. Several watershed projects are being funded by grant monies made available by the Clean Water Act. Citizens, government and industry all support continued environmental monitoring and sampling for contaminants.
The state's contractual obligations to divest of Mental Health lands in Anchorage, Kenai and the Susitna Valley may cause legal conflicts with the proposed best interest finding.	See response to Issue 3.
A coordinated long-term multi-agency water quality monitoring for Cook Inlet should be implemented as suggested by the 85A stakeholder process.	DNR is preparing a project proposal to establish a clearing house for the many water quality research projects that are taking place in the Cook Inlet watershed. The proposal will be submitted to the <i>Exxon Valdez</i> Trustee Council. The need for monitoring is being addressed. The Governor has introduced legislation that would provide for a water quality monitoring tax credit program.

# National Audubon Society, Alaska Office, John W. Schoen, Ph.D., Executive Director, 7/25/97

The sale area is too large. The Audubon Society strongly objects to such a large lease sale. This 4.2 million acre lease sale area will remain open for a decade. The Audubon Society does not oppose all oil and gas leasing in Southcentral Alaska but it does not believe that it is in Alaska's best interest to lease such a large area with limited environmental analysis.

See response to Issue 1.

The lease sale process does not provide adequate public review particularly with respect to the sites of high wildlife value. The proposed sale area includes eight legislatively designated state game refuges and critical habitats including Palmer Hay Flats SGR, Goose Bay SGR, Susitna Flats SGR, Trading Bay SGR, Anchorage Coastal Wildlife Refuge, Kalgin Island CHA, Clam Gulch CHA, and Anchor River CHA. If a lease sale is held, it should undergo a much more thorough environmental assessment and public review, particularly for the important state refuges and critical habitats contained within its borders.

See response to Issue 8. DO&G appreciates the concern of the National Audubon Society. Oil and gas leasing has taken place in Cook Inlet for the last 40 years and during that time has included many of the areas which are now state game refuges and critical habitat areas. In some cases, there were active oil and gas leases when the game refuge or critical habitat was established and the legislature recognized this. For example, in the statutes establishing the Trading Bay State Game Refuge, the legislature recognized that "all existing [oil and gas] leases shall be valid and continue in full force and effect according to their terms." AS 16.20.038(c). The statute also specifically allows further oil and gas exploration and development as long as it is compatible with the purposes of the statute. Working with ADF&G, DO&G has developed proposed mitigation measures for these special areas which include surface entry restrictions and seasonal operations restrictions. See Chapter Nine and proposed Mitigation Measure 21. These proposed mitigation measures have been used in past lease sales for these same areas with success.

#### Cook Inlet Keeper, Shavelson, Bob, Executive Director, 7/25/97

As a result of the stakeholders process for Sale 85A, Governor Knowles directed DNR to initiate a number of policy directives, including: coordinating water quality and protection among the state's resource The need for monitoring is being addressed. The Governor has introduced legislation which would provide for a water quality monitoring tax credit program. As for deleting tracts and enhanced notice, see response to Issues 8 and 9

agencies, deleting those tracts within the Cook Inlet basin where industry expressed low interest, and providing enhanced notice for citizens residing within the proposed areawide sale area. To date none of these directives has been implemented.	
There is no demonstrated need for this sale. Industry has consistently expressed low to moderate interest in Cook Inlet tracts.	See response to Issue 5. Industry continues to have an active interest in Cook Inlet, as demonstrated by the participation in Sales 85A and 85A-W, and by the flurry of permitting activity that is ongoing.
Due to the large geographical expanse of the sale including sensitive fishing, subsistence and habitat areas, this sale will violate the KPBCMP Policies 11.1, 11.2, 11.3, 11.4, and 13.	DO&G has included proposed mitigation measures to address these policies and assure compliance with the KPBCMP. As specific projects are proposed additional mitigation measures may be imposed if necessary. For more information see Chapter Three, "Fish and Wildlife," Chapter Four, "Current and Projected Uses," Chapter Five, "Specific Issues," Chapter Six, "Cumulative Effects," Chapter Nine "Proposed Mitigation Measures," and the ACMP consistency analysis. The analysis lists those measures that assure compliance with the KPBCMP.
Federal Lease Sale 149 and state Sale 85A demonstrated considerable opposition to oil and gas activities in sensitive areas in Cook Inlet, specifically, the Kachemak Bay watershed, the Kenai River watershed, the Anchorage bowl, Tuxedni Bay and the Susitna Flats. With no offsetting industry interest in leasing these specific areas, DNR has a public trust (i.e. constitutional) obligation to remove such areas from leasing consideration.	Article VIII of the Constitution of the State of Alaska provides direction for natural resources development. Section 1 reads: "It is the policy of the state to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest." Article VIII Section 8 of the Alaska Constitution reads: "The legislature may provide for the leasing of and the issuance of permits for exploration of, any part of the public domain or interest therein, subject to reasonable concurrent uses." The legislature has found that "the people of Alaska have an interest in the development of the state's oil and gas resources" and has specified in AS 38.05.180 that the Commissioner of DNR biennially prepare a proposed Five Year Oil and Gas Leasing Program.

	DO&G is not aware of industry's lack of interest in the areas mentioned. In the past two sales tracts along the Kenai River have been leased. Unless an area is devoid of the conditions necessary for the accumulation of hydrocarbons, one cannot state that industry will not be interested in exploring it.
Sale 85 includes substantial acreage which the state has no legal authority to lease. As a result the public is unable to comment intelligently on those tracts actually available for leasing.	This proposed Cook Inlet Areawide lease sale does not contain any acreage which the state has no authority to lease. See plate I and response to Issue 7.
The inclusion of Mental Health Trust Lands in the proposed sale, (particularly the acreage within the Kenai River watershed), combined with DNR's contractual obligation to divest of those holdings, precludes modification of the sale before close of the comment period. As a result, a defacto best interest finding has been made illegally with respect to those tracts.	No Mental Health Trust land is available for lease in this proposed Cook Inlet Areawide sale. Mental Health Trust land is distinct from other state land in that it is managed by the Mental Health Trust Authority solely in the best interest of the trust and its beneficiaries. The Mental Health Trust Authority may offer its lands for oil and gas leasing separate from the state's leasing program.
Meaningful mitigation measures must include setbacks from the floodplains of sensitive riverine systems, rather than setbacks from the river banks.	The intent of proposed river, stream and lake buffers is to protect the riparian zone. All proposed setbacks are as large and often greater than riparian zones. The definition of a riparian zone varies depending on its usage, but generally refers to the zone between wetlands and uplands. One-half mile and 500 feet are easily understood and clearly defined distances that operators can plan activities around.
With the decline of agency resources, it is critical that citizens groups obtain the necessary financial support to effectively monitor oil and gas operations.	ADNR agrees that funding is critical to the success of citizen groups. Funding sources include organizations, industry, local government, and federal grant money. For example, the Cook Inlet Keeper organization is funded by fines levied on Cook Inlet industry operators for violations of EPA permit requirements. Several watershed projects are being funded by grant monies made available by the Clean Water Act. Citizens, government and industry all support continued environmental monitoring and sampling for contaminants.

# Alaska Center for the Environment, Kathleen Peggar, 7/23/97

The sale area is too large and includes private land. Industry has not complied with the governor's directive to identify areas where there is no industry interest. Some impacts may not be mitigated such as the visual impact of an oilrig just off the coastal trail. The title of the proposed sale is confusing to the public. The public will be shut out of the decision making process for the next ten years. Who determines what constitutes substantial new information? The state should delete areas of great environmental, fish wildlife and/or social value. Complete a separate BIF for sensitive lands. Ensure industry identifies those lands they are not interested in and remove them from the sale. Ensure that mitigation measures are binding. Add a non-surface occupancy requirement in sensitive areas.

See responses to Issues 1,2, 9 and 10. It is highly unlikely that an oilrig would be located just off the Coastal Trail. DO&G agrees that having sales with similar numbers can be confusing. Annual leasing eliminates the numbering system and the need for exempt sales (labeled "A" or "AW", depending on the appropriate statute). See Chapter One for a description of the Areawide leasing process. It may be possible to access the area by onshore directional drilling. Industry has an incentive to do this because offshore rigs are far more expensive than drilling from land. Until specific prospects are identified it is impossible to predict what the visual impacts will be. The commissioner of DNR will determine what constitutes substantial new information. DNR is not required to prepare a separate BIF for sensitive lands under AS 38.05.035.

# Cook Inlet Marine Mammal Council, Joel Blatchford, Chairman, Marc Lamoreaux, Coordinator, Anchorage, AK, 6/23/97

Ecosystems in and around the proposed lease sale area support numerous marine mammal species, as well as anadromous fish such as salmon. These are crucial for subsistence cultures. We strongly support environmental mitigation language in all such development, and urge that marine mammal mitigation research be conducted and heavily weighted in guiding such development. Current scientific information is inadequate to document present and potential effects of oil development and spills on Cook Inlet marine mammals in much of the Cook Inlet.

DO&G recognizes the extraordinary resource values of Cook Inlet. Fish and Wildlife are described in Chapter Three and uses, including subsistence are discussed in Chapter Four. DO&G agrees that research on marine mammals of Cook Inlet is needed. For example, winter distribution of Cook Inlet beluga whales is not well understood. DO&G is interested in suggested language for proposed mitigation measures to protect marine mammals.

We request that any plans for oil and gas development in the Cook Inlet area should proceed in regular and timely consultation with, and only with the express approval of CIMMC.

DO&G encourages the Council to participate in both the lease sale and permit approval process. DNR is committed to ensuring that subsistence resources are protected from adverse effects of development and that subsistence uses are in no way restricted by oil and gas activities. Subsistence harvesting is considered for any proposed offshore operations during permit application reviews.

We request that the discharge permits for Cook Inlet oil drilling rigs should at least mandate stricter discharge limitations, and preferably disallow such toxic discharges altogether. More consideration should be given to locating safe dump sites for toxic byproducts of oil extraction before such large scale lease sales are approved.	Discharge of drilling byproducts into Cook Inlet is authorized by EPA's National Pollution Discharge Elimination System permit. The current permit is under review and may be reissued following a subsistence impact study being conducted by EPA. See Chapter Five for more detail on Cook Inlet marine water quality and effects of oil and gas activities.
We support the tract deletions which the Alaska Region National Marine Fisheries Service has recommended to protect Cook Inlet beluga whale habitat	Comment noted. See response to NMFS letter of 6/2/97.
Kachemak Bay Conservation Society, N Co-President, Joel Cooper, Board Mem	lina Faust, Co-President, Mike O'Meara, ber, Homer AK, 7/22/97
There is no imperative reason right now to lease these areas.	See response to Issue 5.
Delete tracts south of Ninilchik. Other areas of concern include offshore areas south of Kalgin Island, especially Tuxedni Bay, all areas that have been designated as Critical Habitats or State Parks such as Redoubt Bay and Trading bays or Potter Marsh should be deleted. Development in biologically important areas such as the Kenai River, Anchor River, Susitna River, Kasilof River, and Eagle River to name a few, should be removed from consideration.	See response to Issue 10. DNR recognizes the importance of these areas for hunting, fishing, recreation, and tourism. Mitigation measures have been proposed to protect these areas.
Provide detailed maps which citizens can use to identify their own parcels. The State needs to add roads and other common identifying features to the maps sent to each community.	See response to Issue 7.
Oil drilling requires tremendous amounts of water and has the potential to affect aquifers. Private and public drinking water sources are extremely important and must be protected from pollution and depletion.	See Chapter Five for a discussion of fresh water aquifer protection.

The stakeholders process for Lease Sale 85A produced some areas of consensus which have yet to be implemented such as coordinated water quality monitoring, better notice with better maps, and getting industry to identify tracts that they don't want. These must be implemented for the public to have faith in the stakeholders process.	See response to Issues 7 and 9. The need for monitoring is being addressed. The Governor has introduced Senate Bill 294, which would provide for a water quality monitoring tax credit program.
Strong mitigation measures should be instituted:  1.Create a drilling pad observer program for monitoring the operations. Observer program should be funded by industry and operated by an independent program such as the Cook Inlet Keeper.	DNR believes that existing laws and regulations are sufficient to protect the public and the benefits of additional monitoring need to be weighed against the additional costs.
2. All mitigation measures should apply on all private property.	DNR recently amended the lease and unit plans of operations regulations to require that any operation drilling into state oil and gas leases must obtain an approved plan of operations, regardless of the surface estate ownership. All proposed mitigation measures attached to the plan would apply to the surface regardless of ownership. These amendments became effective on February 21, 1998.
3. No leases should be sold south of Ninilchik. Any leases within the watersheds of Homer and Kachemak Bay should be deleted to protect the Kachemak Bay Critical Habitat and Homer area drinking water.	Please see response to Issue 10. See also Chapter Two for a description of area water resources, and Chapter Five for a discussion of fresh water aquifer protection.
4. Use only existing roads. No new roads should be constructed to accommodate remote sites. Consider delivering rigs by helicopter to avoid heavy loads on fragile roads.	It is not always possible to use existing roads, and it may be necessary to construct new roads. The construction of new permanent roads during the exploration phase, however, is discouraged (see proposed Mitigation Measure 3). Generally speaking it is best not to prohibit an activity in the absence of the facts necessary to make an informed decision. Use of existing roads is encouraged and may be required by both the ACMP and the project's own economics. It is usually in the lessee best interest to use existing facilities if possible.

5. Provide written notification to all private landowners in the lease area whose private lands are included in the sale and invite them to stakeholders meetings. The process should not proceed without these important notifications.	It would be cost-prohibitive to provide written notification to each private landowner in the region. The commissioner convened a stakeholders process and the public was invited to observe and comment at the public hearings. See response to Issue 8.
6. Improve the oversight capabilities of DEC and ADF&G so they can deal with cumulative effects of logging and now oil and gas development.	DNR is not aware of any evidence to suggest that that DEC and ADFG do not have enough oversight authority to protect public resources. Agencies must prioritize their activities to accomplish the greatest public benefit with limited resources. The prioritizing of activities in DEC and ADFG is a matter better taken up with those agencies.
7. No drilling muds should be stored in the region.	Drilling muds are stored temporarily in impermeable cells before proper disposal. See Chapter Five. Disposal of drilling byproducts is regulated by proposed Mitigation Measures 18 and 19.
8. Noise in neighborhoods must be mitigated as it would impact quiet, rural lifestyles.	Under proposed Mitigation Measure 28, plans of operation submitted for review and approval must describe the lessee's efforts to communicate with local communities, and interested local community groups, if any, in the development of such plans. Measure 29 requires lessees
	submit a plan of operations, required by 11 AAC 83.158, to the state for approval. Where surface activities are proposed on non state-owned land, lessees must submit a copy of the plan of operations to the private surface owner. Plans of operation must describe the lessee's efforts to minimize impacts on residential areas and privately-owned surface lands.
9. Property devaluation must be mitigated.	DNR is unaware of any property devaluation as a result of oil and gas activity. Please provide supporting evidence regarding this issue.

10. Water rights and the water sources of private landowners must be protected.	Sources of drinking water in the region are described in Chapter Two. Effects on and protection of fresh water are discussed in Chapter Five. Individual landowners may apply for water rights with the DMWM. Temporary and permanent water withdrawals for industrial purposes requires a permit from DMWM.
11. No drilling within 1/2 mile of any watershed or its tributaries. Do not allow any exemptions.	Proposed measure 6 prohibits siting onshore facilities, other than roads, docks or pipeline crossings, within 500 feet of all fishbearing streams and lakes. Additionally, siting of facilities will be prohibited within one-half mile of the banks of Harriet, Alexander, Lake, Deep and Stariski creeks, and the Drift, Big, Kustatan, McArthur, Chuitna, Theodore, Beluga, Susitna, Little Susitna, Kenai, Kasilof, Ninilchik and Anchor rivers. New facilities may be sited within the one-half mile buffer if the lessee demonstrates that the alternate location is environmentally preferable, but in no instance will a facility be located within one-quarter mile of the river bank. Proposed measure 21 restricts activities in legislatively designated state game refuges and critical habitat areas. Under proposed Mitigation Measure 27, Lessees must disclose any requests for exceptions to these proposed mitigation measures and advisories in their plans of operation and applicable permit applications.
12. Seismic testing has the potential to foul wells. Well owners must be informed before seismic tests begin.	See Chapter Five for a discussion of possible effects of oil and gas activity on water quality. Past experience has shown that this is usually not a problem. Companies design their programs to minimize the possibility of affecting wells. If a company's program might include crossing private property, the company seeks permission in advance. They also might attempt to identify and locate wells by reviewing recorded water rights or well log data. The operators are also liable for damages, so it is the responsibility of landowners to notify them should something happen.

13. Consider an industry-funded mitigation fund from profits to help communities deal with the impacts that the boom/bust growth cycle will have on communities.	Given the recent history of Cook Inlet oil and gas exploration it is unlikely that a boom/bust cycle will result from areawide leasing. When and if major discoveries are made, the state will be able to assess the impacts and consider mitigation measures. There is presently no impact fund program associated with the state leasing program. Such a program could be created by the legislature, private industry sources, federal sources, or a combination.
14. Require directional drilling for subsurface occupancy on private lands.	Directional drilling may be used in some instances to avoid surface entry. However, some property owners might welcome the activity on their property. For a discussion of directional drilling, see Chapter Six.
15. Oil spill cleanup equipment as well as emergency alternative drilling equipment in case of blowouts should be stored in key locations around the Cook Inlet basin.	It is not within DNR's authority to require operators to stockpile spill response equipment. However, ADEC's regulations require operators to have necessary equipment on hand, to access more equipment through agreements and to describe such equipment and arrangements in their oil spill contingency plans. See Chapter Five, "Specific Issues," on spill prevention and response. The contingency plans must also contain a plan for dealing with a blowout, including the drilling of a relief well.
16. Seismic testing must not be permitted in wetlands areas that have salmon fry. Many major wetlands have been shown to be salmon nurseries.	ADFG has a computer program developed specifically for establishing setback from anadromous water bodies. All seismic permit utilizing explosives must adhere to these setbacks. The presence of salmon fry would qualify a water body for classification as an anadromous stream. The appropriate measures to protect salmon fry are already being taken through the permit process.
17. Temporary roads should not be allowed as this adds tremendously to the cumulative effects, particularly during exploration if the roads are then found to be unnecessary. Temporary roads still allow ATV access after removal.	See response to comment 4 above.

18. A 500-foot buffer is not adequate separation of oil storage facilities and sewage ponds from marine waters and freshwater supplies, streams and lakes, and key wetlands, and certainly exemptions are not acceptable. Allow no exemptions from buffers.	This buffer distance reflects ADEC regulations and applies to all storage and sewage ponds, regardless of whether it is oil and gas related or not. Under proposed Mitigation Measure 27, Lessees must disclose any requests for exceptions to these proposed mitigation measures and advisories in their plans of operation and applicable permit applications.
19. Disposal of produced waters shall not be permitted on site except by approved subsurface disposal techniques.	Proposed measure 19 regulates wastewater disposal. Unless authorized by NPDES and/or state permit, disposal of wastewater into freshwater bodies, intertidal areas, or estuarine waters is prohibited. Disposal of produced waters to freshwater bodies, intertidal areas, and estuarine waters is prohibited. Disposal of produced waters in upland areas, including wetlands, will be by subsurface disposal techniques.
20. Exemptions shall not be approved for new solid waste disposal sites.	Solid waste disposal sites are regulated and approved by ADEC under 18 AAC 60. There are circumstances where solid waste disposal sites are needed. Many wastes can be hauled to existing sites. Some lessees operate their own sites, and others use public facilities such as municipal landfills. Currently the public landfills are not permitted to handle drilling wastes. One alternative is to grind and inject drilling wastes. The preferred method of disposal of muds and cuttings is by injection (see proposed measure 18), This may not be possible unless the well penetrates a formation capable of receiving the wastes. Grinding and injection is preferred where the geology is receptive and economics support it. Grinding and injection is more feasible during development than during exploration. This is also when the greatest volume of wastes are generated.
21. Wastewater disposal shall not be allowed into any freshwater bodies, intertidal areas, or estuarine waters.	Under proposed mitigation measure 19a, disposal of wastewater into freshwater bodies, intertidal areas, or estuarine waters is prohibited.

22. Surface discharge of reserve pit fluids will be prohibited.	Reserve pits and sealed waste cells are designed to prevent the release of fluids to the surrounding soil. The DEC permit stringent design, and monitoring requirements provide a high degree of protection to the resources in the area. Fluids not injected are unlikely to escape a modern waste disposal cell.
23. Forest clearing for seismic activity must not create additional spruce bark beetle problems. Wherever possible, seismic activity should use the old seismic lines to avoid cutting new ones.	Proposed Lessee Advisory 3 requires that forest clearing for seismic activity must be approved by the director, after consultation with DOF and ADF&G. Lessees must comply with AS 41.17.082 of the Alaska Forest Resources and Practices Act which requires that all forest clearing operations and silvicultural systems be designed to reduce the likelihood of increased insect infestation and disease infections that threaten forest resources. In addition, before beginning an operation on forest land, the lessee will be required to file a detailed plan of operations with the state forester under 11 AAC 95.220. In order to minimize the spread of destructive forest insects the lessee must comply with the provisions of 11 AAC 95.195 which describes the approved methods of disposal or treatment of downed spruce trees to minimize the spread of bark beetles or reduce the risk of wildfire.
24. A safety plan must be in place in case of a gas blowout in a neighborhood.	Industry oil spill contingency plans must contain a plan for dealing with a blowout, and the plan must be approved before operations can begin.
25. Do not allow air quality to deteriorate around drilling platforms.	ADEC regulates air quality through permits. The process is described in Chapter Eight. Lessees are required to adopt conservation measures to reduce hydrocarbon emissions.
26. Reserve pits will not be allowed. Drilling solids and fluids will be temporarily stored in diked and contained tanks. Solids shall not be disposed of in any reserve pits to be later capped.	See response to comment number 20.

27. It is time for Alaska to begin reducing CO<sub>2</sub> emissions and the burning of fossil fuels. Alaska should become a leader in innovating change of energy use including solar, wind power, hydrogen fuel cells and other new technologies and reduce it's dependency on oil

Proposed Lessee Advisory 5a encourages lessees to adopt conservation measures to reduce hydrocarbon emissions. Proposed Lessee Advisory 5b recognizes that in the long run sources of energy other than oil and gas will be needed and lessee participation in conducting research on alternative energy resources is appreciated.

28. Citizens should provide DO&G with a list of prioritized areas that should not be included in lease sales.

DO&G welcomes citizen input on the leasing process, however, only the legislature has the authority to remove areas permanently from leasing. DNR prefers to use proposed mitigation measures, rather than tract deletions to protect sensitive areas. See response to Issue 10.

#### Alaska Survival, Rebecca Long, Director, Talkeetna, AK, 8/14/92

Opposed to Sale 85. Environmental protection can be achieved under the following conditions:

Zero discharge for oil and gas wastes in Cook Inlet.

DO&G believes that environmental protection can be and is achieved under the existing regulatory regime. DO&G also recognizes potential adverse effects of oil and gas activities through this document. Where adverse effects of oil and gas development cannot be avoided, mitigation measures are applied to activities so as to reduce or minimize those effects. Discharges are regulated under the National Pollution Discharge Elimination permit, administered by EPA. The current permit is under review and may be reissued following a subsistence impact study being conducted by EPA. See Chapter Five for more detail on Cook Inlet marine water quality and effects of oil and gas activities.

The state must establish a coastal effluent fee system to encourage industry to eliminate discharges. The state must establish and provide funding for an ongoing monitoring system. An effluent fee system would require federal involvement as EPA regulates discharge limitations. However, in the interests of resource protection, such a system could be created and funded by the legislature, private individuals, federal sources or a combination. The need for monitoring is being addressed. The Governor has introduced legislation which would provide for a water quality monitoring tax credit program. Several watershed protection initiatives are underway in Cook Inlet. Funding is provided by industry and federal Clean Water Act programs. ADEC, AOGCC and DNR all monitor oil and gas activities.

Mandate closed-loop drilling systems. Solid wastes generated by any stage of drilling must be removed to an appropriate hazardous waste site.	Disposal of solid waste is regulated under 18 AAC 60 programs administered by ADEC. Proposed measure 18 restricts solid waste disposal and measure 19, wastewater disposal. The preferred method for disposing drilling waste is through underground injection.
Prohibit the use of reserve pits.	AOGCC regulations require that prior to drilling a well, a proper and appropriate reserve pit must be constructed, or appropriate tankage installed for the reception and confinement of drilling fluids and cuttings, to facilitate the safety of the drilling operation, and to prevent contamination of groundwater and damage to the surface environment (20 AAC 25.047). The state discourages the use of reserve pits for permanent disposal of drilling waste and prefers reinjection of drilling fluids into the substrate. This is discussed in Chapter Five. There may be instances however, where injection is not geologically permissible or the environmentally preferred option or state-of-the-art waste disposal technology. Regulations have also been adopted for closure of inactive reserve pits (18 AAC 60.440).
The exemption of oil and gas wastes from the 1980 Resource Conservation and Recovery Act must be eliminated.	Discharge of drilling byproducts into Cook Inlet is authorized by EPA's National Pollution Discharge Elimination System permit. The current permit is under review and may be reissued following a subsistence impact study being conducted by EPA. See Chapter Five for more detail on Cook Inlet marine water quality and effects of oil and gas activities.
The state should finance research for unbiased baseline data for the Cook Inlet ecosystem.	See response to Issue 9.

Study the cumulative impacts of this proposed sale with sales 74, 76, and federal sale 149.  Suspend any new leasing until this occurs.	The state is required in this best interest finding to describe the reasonably foreseeable cumulative effects of oil and gas exploration, development, production, and transportation on the sale area, including effects on subsistence uses, fish and wildlife habitat and populations and their uses, and historic and cultural resources. This is presented in Chapters Five, Six, and Seven. DO&G believes that this discussion is adequate.
National Parks and Conservation Association, Anchorage, AK 8/21/92	ciation, Mary Grisco, Alaska Regional
A lease sale map should clearly exclude National Park lands as well as Native selected and/or conveyed lands and state selected lands. The proposed Sale 85 area includes portions of Lake Clark National Park and Preserve and Katmai National Park and Preserve. Again, a lease sale map should clearly indicate ownership.	There is no national parkland included in the sale area. See Issue7.
To minimize the effects of leasing NPS and the Conservation Association recommend:	There is no national parkland included in the sale area. See Issue7.
(1) That all state lands within national park units be excluded from oil and gas lease sales	
(2) That potential bidders be aware that the National Park Service will not authorize oil and gas exploration on federal lands within park unit boundaries.	Comment noted. See response to NPS letter of 8/21/92.
(3) That the least environmentally damaging exploration, development and production technologies be used in areas easily visible to the public from national park unit's boundaries.	In the interests of habitat protection, the best technology is used throughout the proposed sale region, regardless of park status.

(4) That the lessee be required to comply with federal as well as state laws and regulations concerning the management of hazardous materials.	The preface to Chapter Nine (Proposed Mitigation Measures) clearly states that In addition to compliance with these proposed mitigation measures, lessees must comply with all applicable local, state and federal codes, statutes and regulations, and any subsequent amendments. Lessees must also comply with all current or future DNR area plans and recreation rivers plans; and ADF&G game refuge plans, critical habitat area plans, and sanctuary area plans within which a leased area is located. Federal, state and local government powers to regulate the oil and gas industry are discussed in the "Governmental powers to Regulate Oil and Gas Exploration, Development, Production, and Transportation" Chapter Eight of this finding. Appendix B lists federal and state statutes and regulations that apply to lease activities.
(5) That the lessee be required to demonstrate clearly its capability to implement an adequate oil spill prevention and contingency plan prior to any exploration and consequent resource development.	Operators must have an approved oil spill contingency prior to beginning their operations. Chapter Five and proposed Mitigation Measure 1 contain a description of oil and hazardous substances spill planning requirements.
(6) That exploration and development activities be minimized to contain any potential damage and contamination to wetlands and acquifers/groundwater sources.	Potential effects of oil and gas activities on surface and groundwater are discussed in Chapter Five.
(7) That to protect the interest of the federal government in case of any drainage of federal oil and gas, the lessee enter into a Compensatory Royalty Agreement with the federal government.	This is speculative and beyond the scope of the best interest finding.
(8) That the National Park Service be allowed to review all lease sale information, all permit applications, plans of operation before final contracts and permits are signed.	Comment noted. The Association has been added to the Cook Inlet areawide mailing list. Permit application reviews include comment periods. Notices are published in newspapers and plans of operation applications may be reviewed by visiting the DO&G permitting section. See response to Issue 8.

(9) That the State prior to any sale perform an evaluation of the potential effects of any exploration and subsequent development on subsistence activities.

Subsistence harvesting in the proposed sale area is described in Chapter Four. Potential effects of oil and gas activities on subsistence, including subsistence resources is discussed in Chapter Six.

#### Kachemak Bay Conservation Society, Nina Faust, President, Homer, AK, 6/2/94

Four reforms should be implemented before further leasing in Cook Inlet:

Significant reduction in permitted discharge levels for crude oil, refined product, drilling muds, and produced waters.

See Chapter Five for effects on marine and fresh water quality. Discharge of drilling byproducts into Cook Inlet is authorized by EPA's National Pollution Discharge Elimination System permit. The current permit is under review and may be reissued following a subsistence impact study being conducted by EPA. See Chapter Five for more detail on Cook Inlet marine water quality and effects of oil and gas activities.

Establishment of spill prevention and response capability in Cook Inlet comparable in quality to that in Prince William Sound.

The finding describes spill prevention and response requirements, but does not speculate on the adequacy of those measures. Oil spill prevention and response in Cook Inlet have different challenges to face than in Prince William Sound. Preparations include planning response strategies, purchasing the necessary equipment and training staff. The oceanography and geography of Cook Inlet are physically different than those of Prince William Sound, and the Inlet has different kinds of facilities to incorporate into the spill prevention and contingency planning process. The crude oil tankers that travel in Cook Inlet are smaller and fewer in number than those carrying North Slope crude from the Valdez terminal. All of these factors contribute to a different risk picture for the Cook Inlet, however, the regulators and operators in Cook Inlet are making a comparable effort to prevent and prepare for oil spills. The industry must adhere to the same laws and regulations throughout Alaska. Please see Chapter Five for a discussion of oil spill prevention and response planning and some of the problems response operations face in Cook Inlet.

Many factors affect oil spill response. Nature plays a large role in the ultimate effect of an oil spill. Factors that affect response include weather, the type of oil, the nature of the spill, and the location. Planning for all contingencies presents a major challenge to the industry and to federal and state agencies. All parties agree that prevention is a very crucial aspect of contingency planning and are working hard to lower the risk of having a spill.

State response planning standards require that tanker operators in Cook Inlet must be prepared to contain, control and clean up a spill of 50,000 barrels of crude oil within 72 hours. In addition, sufficient additional resources must be on-site and operating within that time period to clean up the entire contents of the largest vessel operating in Cook Inlet within the shortest possible time.

Cook Inlet Spill Prevention and Response, Inc. (CISPRI), has large amounts of pre-staged equipment and resources to ensure an immediate and effective response to oil spills, as well as agreements in place with other organizations, such as Alyeska/SERVS, to provide backup capability if required. ADEC inspects drills and reviews the contingency plans of all Cook Inlet operators on an ongoing basis to ensure that state response planning standards can be met throughout the region.

Initiation of a comprehensive, ongoing study of the fate and environmental impacts of oil industry wastes on the region's ecosystem A growing body of evidence gathered over the last twenty years indicate that chronic pollution has not occurred due to the industry in Cook Inlet waters. CIRCAC has conducted a pilot monitoring program of Cook Inlet and found unharmful levels of industry byproducts in sediments. A 1995 study by the University of Alaska, Anchorage issued to MMS found "extremely low concentrations of contaminants, making the inlet 'generally free from toxicity'" (Anchorage Daily News 1995:B-1). DO&G encourages the continued sampling and testing of species which may contain or store industry contaminants. See above reply for Cook Inlet Keeper activities

Improvement of monitoring of industry operations, and better enforcement of laws, regulations, and agreements governing them.

Most monitoring activities are beyond the authority of DO&G, and fall under the jurisdiction of the EPA, ADEC, COE, USCG or AOGCC. Non-governmental oversight has been implemented through the Cook Inlet Keeper program and the Cook Inlet Region Citizens Advisory Council (CIRCAC). CIRCAC conducts a Cook Inlet water quality monitoring program to detect hydrocarbon pollution and identify its source. See section on water quality, Chapter Six. The Cook Inlet Keeper program, will investigate reports of pollution, establish a database on sources of pollution, and review state and federal agency permits under which industry operates.

DO&G should meet with local residents to explain the leasing process. The division should also sponsor meetings between oil and gas industry representatives and other interest groups to discuss potential conflicts.

DNR has conducted several meetings and round table discussions with oil industry representatives and those of other interest groups. Also, through the stakeholder process last year, public meetings in various locations provided the public with opportunity to learn of the leasing process. Some of the proposed mitigation measures are an outcome of meetings with oil industry to Issue 8.

Delete tracts south of 60 degrees, 20 minutes north latitude. Oil and gas development in these areas will result in gear loss and disruption of commercial fishing. Oil and gas development could diminish or destroy sport fishing, and razor clam harvesting in the Deep Creek area.

As a balancing agency, DO&G believes that multiple use can occur on state lands including those south of 60 degrees, 20 minutes north latitude. See Chapter Five, "Commercial Fishing." See response to Issue10. Under proposed Mitigation Measure15 the Commissioner will restrict lease related use as necessary to prevent conflicts with commercial fishing.

Oil and gas exploration and development could have negative impacts to the Deep Creek fishery. The KPBCMP standard 5.0 (10) requires that energy facilities be sited in areas where development will require minimal site clearing, dredging, and construction in productive habitats. Standard 5.0 (13) requires siting facilities in areas of least biological

	productivity, diversity, and vulnerability, where effluents and spills can be controlled.
	Proposed Mitigation Measures 6, 7, 8, 9, and 10, are developed to ensure facility siting and activities minimize impacts. Proposed Mitigation Measure 6 requires facility setbacks from fishbearing streams. Proposed Mitigation Measure 7 limits the siting of new facilities in key wetlands. Proposed Mitigation Measure 8 requires lessees to identify the least sensitive habitat areas and avoid siting facilities there. Proposed Mitigation Measure 9 requires impermeable lining or diking and buffer zones to separate onshore oil storage facilities from fresh and marine waters and key wetlands. Proposed Mitigation Measure 10 requires that
	exploration facilities be temporary. Proposed Mitigation Measure 11 regulates the siting of pipelines. Term 14 maintains public access to the lease area. Proposed Mitigation Measure 17 protects anadromous and other fish-bearing streams. These proposed terms are designed to minimize the impacts of oil and gas exploration and development. Additional protective measures may be implemented at the plan of operations stage when specific projects are proposed.
Any oil and gas development south of 60 degrees, 20 minutes latitude will affect protected federal and state lands. Resource extraction is inappropriate on both environmental and aesthetic grounds. There is simply no way to mitigate the impacts of oil and gas development on lands which have been set aside for their value as undeveloped, natural areas.	See response to Issue 10.

Problems relative to geophysical hazards, dangers of an aging oil and gas industry infrastructure in Cook Inlet, and Coastal Management Program consistency that were raised in Sale 78 apply to Sale 85A as well.

ADEC commissioned a study by Belmar Management Services to compile background information on Cook Inlet oil pipelines and to examine the oil spill risk potential of the pipelines. The study, Oil Pipeline Information, Cook Inlet, Alaska, was prepared for ADEC and CIRCAC and completed in 1993. It provides an inventory and detailed information on each onshore and offshore crude oil pipeline in the Cook Inlet area including location, ownership, design, size, length, installation, safety system, and operation of each pipeline along with information regarding the corrosion protection system and any leak incidents. The study concludes that Cook Inlet platforms and pipelines are fit for purpose and pose no danger. Cook Inlet facilities receive regular maintenance. See discussion of Geophysical Hazards and industry infrastructure under Oil Spill Prevention and Response in Chapter Five, "Specific Issues".

#### Resource Development Council, Jim Cloud, President, 1/21/94

Supports sale 85. Alaska still has enormous untapped energy potential. The United States is more dependent on foreign energy sources than ever. The leasing program is a significant source of revenue for the state. Oil and gas development has created jobs and stimulated the economies of many regions in Alaska. The oil and gas industry is closely monitored and regulated and there is sufficient state and federal oversight to maintain the highest environmental safeguards. Failure to proceed with these leases would be a negative sign to the oil industry, which is already moving business away from the state.

Comment noted. See Chapter Seven "Fiscal Effects," for a discussion of the importance of the oil and gas industry to the state's economy. Also, see Chapter Eight for a discussion on governmental power's to regulate the oil and gas industry.

#### **Public Comments**

# Karen Button, Anchorage AK, 7/28/97

Opposed to Sale 85. Sixty percent of Alaskans live within the sale area, many utilize the Cook Inlet for subsistence and commercial fishing. The state should make subsistence the primary use. The sale area is too large. The oil industry should specify smaller areas of interest.

See response to Issues 1, 4, and 9.

Sugan Mayandar San Eranaisas CA 7	7/20/07		
Susan Alexander, San Francisco, CA, 7 Opposed to Sale 85. The sale area is too large. The result will be degradation of the coast. Leasing gives priority to oil and gas over all other land and water uses. There can be no mitigation of use conflicts with fishing, hunting, recreation, subsistence, wilderness, wildlife and wetlands. Tracts within the sale area are being re-offered because they didn't sell earlier. Directional drilling is unlikely to work well because of Cook Inlet's fractured geology and will not be available. The future of Alaska lies in protecting its scenic beauty.	See response to Issues 1, 4, 5, and 6.		
Emily Anderson, Anchorage, AK 7/28/97			
The sale area is too large. North Slope production is on the rise so there is no need for the oil. This is a beautiful state and is an asset to the entire nation because of its natural wild and unpolluted qualities.	See response to Issues 1 and 5.		
Brandon Benty, 7/28/97			
Opposed to the sale. The sale area is too large and the majority of Alaskans will be negatively affected. The sale allows drilling on private property and gives oil and gas a priority over all other uses.	See response to Issues 1, 2, and 4.		
James Carter, Anchorage, AK, 7/28/97	James Carter, Anchorage, AK, 7/28/97		
Opposed to sale 85. The sale area is too large, drilling may happen anywhere in the entire area for a period of 10 years without public review. Remove sensitive wildlife habitat such as Potter Marsh, the Coastal Trail, Chugach state park and sportfishing locations in Southcentral Alaska. The sale is not needed, it gives priority to oil and gas over all other land and water uses such as fishing, hunting, recreation, subsistence, wilderness, wildlife, and wetlands.	See response to Issues 1, 4, 5, and 10.		

#### Belle Dawson, Anchorage AK, 7/28/97

The state's best interests are not served by this sale. The state's best interests are served by promoting tourism, fishing, hunting, and outdoor recreation. The sate cannot mitigate conflicts with subsistence, fishing and tourism. It is essential that we protect recreational areas. Remove Potter Marsh, the Kenai River, Chugach state park, the Tony Knowles Coastal trail, and the Nancy Lake recreation area. Since most people don't own the subsurface rights to their property drilling could take place anywhere in the sale area for 10 years with no public review.

The history of the Kenai Peninsula over the last forty years has shown that fishing, timber, tourism, recreation, and mining, including oil and gas, can coexist and support one another. The challenge is to balance these competing uses and to assure that development is done with minimum impact to the environment. See response to Issues 1, 2, 4, and 10.

# Jim Glaspell, Eagle River, AK 7/28/97

This large sale offering does not incorporate specific areas with recognized oil or gas potential or industry interest.

The sale area boundary was delineated based on historical industry nominations. Industry has expressed interest in the Cook Inlet basin for many years. See response to Issue 1.

### Cathy Gleason, Anchorage, AK 7/28/87

Opposed to Sale 85. Offering too much land at one time could potentially drive down the lease bids. Drilling would be allowed in sensitive areas such as Potter Marsh, the Kenai River and the Anchorage Coastal Wildlife Refuge. The state has not shown a need or justification for this sale. Sale 85 gives priority to oil and gas over all other land and water uses.

See Plate I for identification of areas where surface entry is prohibited. See also response to Issues 4, 5, 7 and 10.

#### Dallas Hill, Chugiak AK, 7/28/97

The sale area is too large and does not protect landowner's rights.

See response to Issues 1 and 2.

#### Toni Harsh, and Wayne Robinson, Anchorage, AK, 7/28/97

The sale area is too large. Smaller tracts focused on the unique features of a particular area would better guard against unintended consequences. Ten years is too long. Much can change during that period.

See response to Issue 1.

#### Randi Hirschmann, Wasilla, AK, 7/28/97

Opposed to Sale 85. The sale area is too large. Oil rigs will have a negative effect on tourism. There will be conflicts with fishing, hunting, recreation, subsistence, wilderness, wildlife, and wetlands. The state will not be able to mitigate these effects. Private land owners will have difficulty selling and financing their land if there is an active lease on their property. Directional drilling will not work in Cook Inlet. Cook Inlet is one of the most active earthquakes areas in the United States. How can you avoid oil spills, explosions, fires, and exposure to hazardous chemicals in an area where a devastating earthquake is inevitable? Why does the state have to offer Sale 85 to the oil companies? Are there other areas of lesser impact to offer? Why is this lease sale not specific in its drilling sites?

The history of the Kenai Peninsula over the last forty years has shown that fishing, timber, tourism, recreation, and mining, including oil and gas, can coexist and support one another. The challenge is to balance these competing uses and to assure that development is done with minimum impact to the environment. Oil and gas revenues contribute to the development of tourism throughout Alaska by funding marketing efforts, airports, roads, docks, state parks, campgrounds, recreation areas, and historic sites. DNR has, over the years, developed a number of measures designed to mitigate the potential adverse social and environmental effects of specific selected leaserelated activities (see Chapter Nine, Proposed Mitigation Measures). One of the purposes of the public review process for this proposed sale is to identify potential conflicts and determine how to best avoid them. An active lease does not always mean there will be activity. Statistically, exploratory drilling has occurred on only 8.5 percent of leases in the Cook Inlet area. In the four decades that oil and gas exploration has been conducted in the Cook Inlet region there has yet to be a case where a drilling rig has been placed on private property without the owner's permission. Though there are limitations in its use because of the nature of the rocks in the subsurface, directional drilling does work in Cook Inlet, and has been utilized for many vears. Because Cook Inlet is such a seismically active area, all structures must be designed and built to meet or exceed the Uniform Building Code specifications for seismic zone 4 (highest earthquake hazard). A final decision has yet to be made as to whether the state will proceed with this areawide lease sale. The sale was proposed because Cook Inlet is a proven oil and gas basin in which there is still the possibility of new reserves being discovered. The Alaska Constitution provides that the state's policy is "to encourage...the development of its resources by making them available for maximum use consistent with the public interest". Until a lessee has submitted a plan of operations, there

	is no way of predicting the location of potential drilling sites. There are certain areas off limits to drilling by zoning, and through no surface entry provisions (see Plate I). See response to Issues 1, 2, 4, 7 and 10.	
How can the state maintain control when it turns over 4.2 million acres to the oil companies?  Why would the state choose the most populated area to lease causing extreme negative impacts on land and people? Why would the state compromise its tourism industry for oil and gas dollars?	The state is not turning over control of its lands to the oil industry. The state will still control and manage its lands for multiple use, including tourism. Oil and gas revenues contribute to the development of tourism throughout Alaska by funding marketing efforts, airports, roads, docks, state parks, campgrounds, recreation areas, and preservation of historic sites.	
Mark Lusch, Wasilla, AK, 7/28/97		
Opposed to Sale 85. The area is too large. This is a giveaway to the oil industry which is too powerful and under regulated.	Please see response to Issue 1. The oil industry provides the bulk of revenue to the state and is an important part of Alaska's economic wellbeing. However, this industry is intensely regulated by several state and federal agencies.	
Ambre McCormick, Anchorage, AK, 7/2	8/97	
DO&G has not fully considered the issues involved in this sale. The sale area is too large. I do not want my home and the surrounding land open for oil and gas drilling for 10 years.	The Preliminary Best Interest Finding is based on the facts and issues known or made known to director and must at a minimum address reasonably foreseeable, significant effects of the proposed lease sale. See Chapter One, "Best Interest Finding Scope," and AS 38.05.035(h).	
	Also see response to Issue 1.	
Gretchen Ganz, and J. Kurtz, Anchorage, AK, 7/28/97		
Opposed to Sale 85. The sale needs to be scaled down and more specifically defined.	See response to Issues 1 and 9.	
Charles, Mobley, 7/28/97		
Opposed to sale 85. Oil and gas is given a priority over commercial fishing, wildlife, wetlands, recreation and aesthetic concerns. The sale area is too large to effectively accommodate a scale of public review and agency management. The entire sale area should be withdrawn.	See response to Issue 1, 4, and 10.	

# Ingrid, Freya, Leif, and Lars Peterson, Anchor Point AK, 7/28/97

State revenue isn't being spent on the public. Permanent fund dividend checks remain low proportionally and state provided public services are lower than 20 years ago—before oil development.

The quality of life for all Alaskans has been improved as a result of oil and gas revenue. To say state revenue (derived mainly from oil and gas activities) is not being spent on the public is incorrect. Money from oil and gas goes into the General and School funds. Money from these funds are allocated to all boroughs and municipalities through municipal assistance, revenue sharing, community development grants, special operating grants, capital project funding and kindergarten through twelfth grade education. The General Fund pays for a portion of public services and capital projects, such as community centers, medical clinics, parks and recreation facilities, public sewer and water systems, etc.

DNR is seizing private land for oil lease sales. This practice is legally questionable, and socially aberrant.

DNR is not seizing private land for its lease sales. Legally, the state can only lease lands in which the state owns the mineral estate. In most cases the state, not the private property owner, has title to the mineral estate. Even so, the private property owner still has rights. A lessee must submit a plan of operations for any leaserelated activity, regardless of who owns the surface estate. The property owner will have the opportunity to review this plan. If the owner and the lessee cannot come to an agreement on the proposed activity, and the lessee is insistent that the activity cannot be relocated, the state (as owner of the mineral estate) will allow the activity to proceed, but will require that the lessee post a bond to cover any damage that might occur.

See response to Issue 2.

Radium 226 is brought up by oil and gas drilling. This is radioactive and is a known carcinogen. With excellent Class II injection disposal well formations in Cook Inlet why is it being dumped into the food chain?

R 226 is common in nature as are many other radionuclides. These nuclides are collectively called Naturally Occurring Radioactive Material (NORM) and exist throughout our environment. While it is possible to concentrate NORM, the oil and gas industry activities that do, are regulated and the material is either injected or placed in containers and shipped to disposal sites in the lower 48. NORM is primarily

associated with the cleaning of used pipe and not drilling muds. Drilling muds typically do not contain levels of R 226, or other nuclides above regulatory standards, and do not concentrate them. Class II injection of muds and cuttings does occur in Cook Inlet and that activity is regulated by AOGCC. Unlike formations on the North Slope, the formations in Cook Inlet are not very receptive to injection of muds and cuttings. Muds and cuttings disposed of in surface pits can occur if authorized. If authorized, the current technique is to place them in a lined pit and the muds and cuttings mixed with cement to prevent them from leaching, should the liner integrity become compromised. The discharge of muds and cuttings into anything but a controlled receiving environment is prohibited by proposed Mitigation Measure 18c. Muds and cuttings or NORM materials are not dumped into any environment where they can get into the food chain.

Sale 85A favors open pit disposal methods despite their history of ground water contamination. Death rates from cancer around Nikiski, Kenai, and Soldotna need to be compared with state and national statistics.

Proposed Mitigation Measures 18 b and c under Waste Disposal, addresses the disposal of muds and cuttings. The preferred method is by underground injection. Open pits are not allowed by DEC who regulates the surface disposal of muds and cuttings. While historically, muds and cuttings contained additives that were harmful to health (not necessarily carcinogens) the industry has responded to these environmental concerns by substituting inert additives. Today's drilling muds contain primarily water-based constituents. Additionally, if surface disposal of muds and cuttings is demonstrated as the most technically advantageous method, the permitting of the pit will be overseen by DEC and will likely have the following features: Muds and cuttings will be de-watered, they will be mixed with cement, they will be placed in a lined area, the liner will be sealed, and the site buried in such a method that water will not accumulate on or next to it.

Oil and gas drilling will destroy subsistence and is in conflict with ANILCA.	Oil and gas leasing is not in conflict with ANILCA. Proposed Mitigation Measure 15 provides that lease-related activity will be restricted when it is necessary to prevent unreasonable conflicts with local subsistence harvests. The division will work with other agencies and the public to assure potential conflicts are identified and avoided. Restrictions may include alternative site selection, requiring directional drilling, seasonal drilling restrictions, subsea completion techniques, and other technologies deemed appropriate.
There has been no evaluation of the financial impact of oil and gas drilling on the economies of commercial fishing and tourism which are the major employers and local government revenue suppliers.	See Chapter Five for a discussion of effects of leasing on commercial fishing and tourism.
How will federal wetland laws be enforced?	The U.S. Army Corps of Engineers has jurisdiction over wetlands, and is responsible for enforcing federal laws.
Cook Inlet oil and gas leases threaten animal species on the verge of extinction. How will the sale affect the habitat and health of resident and visiting species?	The division is unaware of any animal species within the Cook Inlet area that is on the verge of extinction. This, however, is the type of information that is critical in order for the director to make a decision that is in the best interests of the state, and should be forwarded to this division. The reasonably foreseeable cumulative effects of leasing on wildlife habitat is discussed in Chapter Six.
The state has not evaluated global warming in relation to the sale and the environmental and economic effects of this planetary crisis.	It is not within the scope of this finding to evaluate the concept of global warming.
Gary Roeder, 7/28/97	
Please give priority to the local tourist and fishing industries when you deliberate Sale 85. Concerned that large numbers of wells may pop up all over the Anchorage bowl and surrounding area and have an extensive effect on fishing streams and rivers.	See response to Issue 4.

Ian Rowen, 7/28/97	
Opposed to sale 85. Alaska's beauty is about much more than unsustainable resource extraction.	Your comment is noted. DNR attempts to protect the beauty and, at the same time, provide for responsible resource development.
Ruth Sheridan, Anchorage, AK, 7/28/97	
Opposed to Sale 85. The sale area is too large and the time period, 10 years, is too long. Oil and gas leasing can seriously interfere with other uses of the land.	See response to Issues 1 and 4.
Christine Silva, Anchorage, AK, 7/28/97	
Opposed to Sale 85. Smaller areas for lease are more appropriate and will avoid conflicts.	See response to Issue 1.
Jay Stange, Anchorage, AK 7/28/97	
The state should manage its activities with subsistence as the primary use. Indigenous peoples depend on many species which need clean water. The DEC and EPA should not exempt the discharge of oily waters into the Cook Inlet watershed.	See response to Issue 4. Discharge of drilling byproducts into Cook Inlet is authorized by EPA's National Pollution Discharge Elimination System permit. Discharge of oily wastewater is prohibited. The current permit is under review and may be reissued following a subsistence impact study being conducted by EPA. See Chapter Five for more detail on Cook Inlet marine water quality and effects of oil and gas activities.
The sale area is too large. The state conducted the stakeholders following the close of the public comment period for the best interest finding on Sale 85. The state should extend the public comment period for this finding until all meetings and forums are completed.	See response to Issues 1 and 8.

#### Scott Thomas, Girdwood, AK, 7/28/97

Opposed to Sale 85. The sale area is too large. Oil drilling could occur anywhere in the sale without public comment. There will no consideration given to any other industries including tourism, and commercial fishing. Oil and gas development will damage tourism. The Kenai River, Turnagain Arm, Chugach State Park, Potter Marsh, and scenic areas along Cook Inlet could be affected by this sale. The state should not be allowed to lease private property and exempt itself from zoning regulations.

See response to Issues 1, 2, 3, 4, and 10.

# Soren Wuerth, Common Roots/Wild Voices, Anchorage, AK 7/28/97

Opposed to Sale 85. Concerned about our dependence on oil and gas as energy sources.

The sale area is too big and reduces DO&G's ability to evaluate and monitor smaller tracts. The state should withdraw tracts where oil development is unjustified. Industry should identify small, particular areas where they see potential for oil development. Private property owners could be negatively impacted if development takes place on private land. Most of the land in the sale area is not zoned.

See response to Issues 1, 2, 3, 5, 9, and 10. There is a significant public need for the revenue and fuel that areawide leasing will generate due to the decline of oil production on the North Slope and in Cook Inlet. From Talkeetna to Homer, Cook Inlet natural gas is needed to heat homes and businesses, and provide electric power for society to function. Existing users, like the Tesoro refinery, Unocal's urea and ammonia plant, Phillips' LNG plant, and Enstar (serving residences and businesses) will need oil and gas to meet future energy needs. As a result, significant benefits

could result from the Cook Inlet Areawide Sale at the state and local level. See Chapter Seven "Fiscal Effects," and the ACMP Analysis for a discussion of the importance of oil and gas revenue to the state economy. Regarding the lack of zoning, proposed Lessee Advisory 6 states that in populated areas where there is no local planning and zoning, DNR may require in approval of plans of operation that permanent structures be designed to be compatible with the aesthetics of the surrounding area.

### Penny Vadla, Ninilchik, AK, 7/28/97

This sale adversely affects property values, lifestyle choices and health concerns. It adversely affects tourism, fishing and residential areas. Oil spills will have a negative effect on the environment. DNR only listens to people in large population areas, not to people in small communities. Why not look into alternative sources of energy?

The Preliminary Finding discusses the reasonably foreseeable effects of the proposed lease sale on fish and wildlife habitat and populations, cultural and historic resources, and subsistence uses in Chapter Six and on people, economy and government in Chapter Seven. Oil spills certainly would have a negative effect on the environment; however, the many regulations and laws that govern exploration and development activities endeavor to reduce the risk of having a spill and provide for a rapid, thorough response should one occur. Please see Chapter Five for a discussion of oil spill risk, prevention and response and Chapters Eight and Nine for regulations in place and measures proposed to provide protection for the environment. See response to Issue 8 for a discussion of the public notice and stakeholders process. Proposed Lessee Advisory 5 encourages lessees to participate in research regarding alternative energy sources.

### Anita Felker, Anchorage, AK 7/27/98

Opposed to Sale 85.

The sale area is too large. Oil and gas drilling can occur anywhere in the entire sale are for 10 years and the public has no input. Exempt the following areas from the sale: The Kenai Peninsula from Swanson Lakes south to Anchor Point, Kenai River and its drainage's and adjacent waters of Cook Inlet, Turnagain Arm, the entire Anchorage Bowl from Girdwood to Eklutna, the Susitna-Yentna river basins and any lands in the Susitna Basin Management Plan. Sale 85 gives priority to oil and gas development over all other land and water uses. Industry should get leases on specific areas, not in an entire 4.2 million acre tract. There is no need or justification for the sale. There are no restrictions on the sale.

Industry will lease specific tracts not the entire sale area. In addition to all state federal and local statutes and regulations, DNR imposes conditions or limitations known as Mitigation Measures. There are 29 proposed Mitigation Measures and 6 proposed Lessee Advisories for this areawide sale (see Chapter Nine). See response to Issues 1, 4, 5, and 9.

## Carol Jensen, Anchorage, AK, 7/27/97 These sale are not in the best interest of the See response to Issues 1, 4, 6, and 10. state. They will disrupt wildlife habitat, marine resources and the fishing and tourism industries. The sale area is too large, encompassing environmentally critical areas. There will be no public involvement or comment for 10 years. The sale gives a priority to oil and gas over all land and water uses. Oil and gas exploration is not compatible with other public uses. Directional drilling will not work in Cook Inlet. We will see many rigs in populated areas of Anchorage, Mat-Su and Kenai boroughs. The same benefit could be obtained by offering smaller tracts on an annual basis with public comment allowed each year. Delete environmentally sensitive areas, rich fishing grounds, or areas where people live or recreate.

## Mark Luttrell, Seward, AK, 7/27/97

Cancel Sale 85. The sale area is too large. No other industry, user group or interest could ever get an area of that size. A 10-year lease schedule effectively limits public review. Object to the possibility of private surface owners having to give up their rights for oil rigs.

See response to Issues 1 and 2.

## C. James Mathis, and Cynthia Bonney, Anchorage, AK, 7/27/97

Opposed to Sale 85. The sale area is too large. Industry should target smaller specific areas of interest. Drilling could happen anywhere in the sale area for a period of 10 years.

See response to Issues 1 and 9.

## Peggy Mullen, Anchorage, AK, 7/27/97

Opposed to Sale 85. Citizens were not given enough time to comment during the busy summer season. The deadline should extended until October. Concerned about the effects of oil and gas development on Kenai River and Cook Inlet salmon populations from spills. The sale gives a priority to oil and gas leasing over all other uses. Drainage and fill of wetlands, improper culvert installation and other activity has decimated king salmon returns in Soldotna Creek. Oil and gas development put our water supply at further risk.

There was a six-month comment period on this proposed areawide sale which ran from January 28, to July 28, 1997. Additionally, there was a stakeholder process in September and October. The Commissioner convened a group of 11 Alaskans representing private landowners, environmental groups, tourism, oil and gas and support industry, Native corporations, tribal councils, commercial fishing, and sport fishing. Each stakeholder meeting included a public hearing. Meetings were held in Wasilla, Anchorage, Soldotna, and Homer. The state makes every attempt to allow citizens ample time to comment outside of the commercial, subsistence, and sport fishing season. Following the release of this preliminary finding there will be 90-day comment period. The public is encouraged to get their comments in early to avoid conflicts with the busy summer season. Proposed Mitigation Measure 1 requires an oil spill contingency plan. Proposed Mitigation Measure 6 requires a minimum 500-foot setback from all fishbearing streams. Proposed Mitigation Measure 7 limits the siting of new facilities in key wetlands and sensitive areas. Proposed Mitigation Measure 17 protects anadromous streams. See response to Issues 4, and 8.

## John Reeder, Anchorage, AK, 7/27/97

Opposed to sale 85. Many of the proposed areas are not suitable for leasing. The state is letting industry decide which areas to lease and this feeds the conflict between industry and the public. Reconsider the inclusion of large urban areas or areas of conflicting surface uses.

Please identify specific areas that you believe would be unsuitable for leasing. In as much as industry bids on available acreage, it is true that they decide which areas to lease. Residents of Southcentral Alaska benefit from their proximity to Cook Inlet oil and gas development. Leasing in urban areas will be subject to local ordinances and regulations. After tracts have been leased and specific projects proposed, conflicting surface uses can be identified and mitigated.

#### Jeff Richardson, Homer AK7/27/97

Opposed to Sale 85. The current leasing system strongly discourages meaningful public participation in developing effective mitigation measures. Effects are likely to be cumulative over time and difficult to measure in the near term. Areawide leasing presupposes that development can coexist with other resources without doing them gradual harm. This is naïve and disingenuous. Due to funding cuts by the legislature it is unlikely that mitigation measures will ever be implemented.

DNR encourages public participation in the leasing process through the public comment process. You are welcome to comment on the proposed mitigation measures in this preliminary finding. The Stakeholders also suggested changes to mitigation measures during their deliberations. See response to Issue 8. Mitigation measures become part of the lease, which is a contract between the lessee and the state. The state makes every effort to assure protective measures are implemented and enforced.

## Ruth Wood, Anchorage, AK, 7/27/97

Opposed to Sale 85. Can the state find a way to transfer subsurface rights to property owners? Will the state guarantee private property owners the right to keep developers off private property? Will the state exempt itself from zoning restrictions? How will the state protect our rights to hunt, fish, hike, ski, etc., in this popular area?

See response to Issues 2, 3, and 4.

# Samuel Burris, Anchorage AK, 7/26/97

Opposed to Sale 85. The sale area should be protected from development because 60 percent of the state's population live in the area. Tourism will be negatively impacted.

With 60 percent of the state's population living within the sale area, a great deal of development has already occurred. DO&G makes every effort to balance environmental protection with development to ensure that multiple use can occur on state lands and that oil and gas development can be compatible with other uses such as tourism. This is done through the imposition of Mitigation Measures, which are listed in Chapter Nine. In addition lessees are required to comply with all federal, state, and local statutes and regulations.

## R. John Strasenburgh, Anchorage, AK, 7/26/97

Opposed to sale 85. The sale area is too big and 60% of the state's population live within it. The sale includes a large amount of private property and has not detailed how it will protect owners. Opposed to the area being offered for 10 years. No areas are off limits. The state should remove private property, recreational land, wildlife habitat and wetlands from the sale, specifically the Yentna and Susitna river areas.

See response to Issues 1, 2, and 10.

### Bill Stockwell, Cooper Landing, AK, 7/26/97

Opposed to sale 85. This 10-year program will short the public process. Our watersheds and marine life support our way of life. The public must always be involved in this process.

The public will have an opportunity each year to comment on the areawide sale. See response to Issue 1.

## John Strasenburgh, Anchorage, AK, 7/26/97

Opposed to sale 85. The sale area is too large. The state retains the mineral rights to a large amount of private property but has not detailed how it will protect private property owners. Opposed to the area being available for 10 years. Individual one year offerings would be better. Then the proposal can be altered to reflect experience as well as public input. Declare private property, recreational

See response to Issues 1, 2, and 10. The northern area considered in this finding is set aside for exploration licensing only (see Plate I). No leasing will take place in this area. Should a license proposal be received there will be a separate public process initiated.

lands, important wildlife habitat and wetlands off limits. Specifically exclude the entire north portion of the sale. The Yentna and Susitna river areas are important winter recreation areas, and give more to the state than oil and gas leases.

#### Jim Burkholder, 7/25/97

Opposed to Sale 85. Too big. Too long (10 years). Too little public input. Not needed. Too large an impact on population centers.

See response to Issues 1, and 5.

## Betty Dean, Sterling, AK 7/25/97

Some areas are too valuable to be subject to the risk of an accidental oil or gas spill. The Kenai River watershed and the shoreline of commercial fishing grounds should be exempted from this sale. See response to Issue 10.

### Rose Faust, Homer, AK, 7/25/97

The sale area is too large. The majority of Alaskans live in the sale area and most do not own subsurface rights. There has been much protest in recent years but the state ignores them.

See response to Issues 1 and 2. No public input has been ignored. DNR considers all information in arriving at a balanced decision. One must, however, realize that what is in the best interests of Alaskans as a whole may not be the preference of a few.

# Thomas Warner, Bethel, AK, 7/25/97

Opposed to Sale 85. The sale area is too large and would be open to drilling for 10 years with no provision for public input on specific areas. This area encompasses large tracts of private property with Mental Health Trust Lands, wildlife refuges, wetlands, and other areas that would be in direct conflict with oil and gas drilling. Private owners would have no say in what happened to their property. Mitigation measures are a joke. The state has a history of caving into to every whim of the oil industry. There is no need for such a huge lease sale, the state should target small specific areas for potential leasing.

See response to Issues 1, 2, 3, 4, 5, and 9. Decisions that are in line with our constitutional mandate may, at times, be viewed as "giving in", but this is an inaccurate allegation.

## Joyce Wilson, Anchorage, AK, 7/25/97

Delete the following areas: Potter Marsh, Kenai River, Kalgin Island, Clam Gulch, Anchorage Coastal State Wildlife Refuge, Goose Bay, Fire Island, Turnagain Arm, Ninilchik, Chisik Island, Susitna River, Yentna River, Knik Arm, Chugach state Park, Big Lake, Anchor Point, Anchorage, and privately owned property as well as Cook Inlet. These areas are sensitive, critical wildlife habitat areas, and tourist attractions. In addition the public has not been adequately informed of the plans for oil and gas activities.

See response to Issues 8 and 10.

## Larry and Cathy Alcorn, Anchorage, AK, 7/24/97

Due to the size and scope of the sale area it is impossible to predict which areas will be targeted for oil and gas extraction. We have to assume that public park land in Anchorage, scenic areas along Turnagain Arm and Big Lake are all vulnerable to oil and gas exploration. Why is the area so large? What is the official position of the municipalities and Native Corporations whose lands are encompassed by this lease?

Leasing will be prohibited in state parks. No national parks are included in the sale area. DNR cannot speak for Native Corporations or municipalities. Questions concerning their "official position" on this areawide sale should be directed to them.

#### Robert Allen, Homer, AK, 7/24/97

Supports Sale 85. I'm forced to leave the Homer area for employment. I'm interested in the development of the oil industry in this area and feel it can be done without environmental harm.

This areawide sale may lead to employment opportunities. See Chapter Seven, "Fiscal Effects."

### Obed Nelson, Anchorage, AK 7/24/97

The lease area is too large and some sensitive areas should be removed from it. Delete the area west of Skilak Lake comprising the Kenai River and surrounding area.

See response to Issues 1 and 10.

#### Marcia and Michael Kean, 7/24/97

Opposed to any oil drilling in the Yenta River area.

Seeresponse to Issue 10.

#### Tom Macchia, Anchorage, AK, 7/24/97

Opposed to Sale 85 until and unless we get representation for the people of Alaska rather than fronts for multinational corporations.

The decision to offer state lands for oil and gas leasing is ultimately made by the people of Alaska through their elected representatives.

#### Paul Zimmerman, Kasilof, AK, 7/2497

The sale area is too large for a best interest finding to address the complexity of all of the Cook Inlet drainage. Smaller areas would allow for site specific comments planning and assessment of impacts. The length of time is too long. Offering tracts each year does not allow for consideration of new information. Wait for MMS studies due at the end of 1998 and 1999. The comment period for this sale is too short and comes during the busy summer season.

This Preliminary Best Interest Finding will be followed by a 90 day comment period, beginning on March 31. See response to Issue 1. It would not be in the state's best interests to delay the preliminary finding until studies are completed.

#### Pam Cravez, 7/23/97 The sale area is too large. Areas included have See response to Issues 1 and 5. drawn insufficient interest in the past. Kathy Holt, 7/23/97 Keep all river systems on all sides of Cook All major rivers have ½-mile buffers along them, and anadromous streams have 500-foot Inlet out of the sale. Keep the Inlet out south of the Forelands. Keep my property and that buffers. Therefore, it is unnecessary to delete the of my neighbors out of the sale. There should river system from the sale area. Companies will be required to access any reserves located under be no lease sale until the state government proves that it believes a clean environment is these water bodies through the use of directional in the states best interest. drilling. Most property owners only own the surface estate, and not the mineral rights. However, there has never been a case in Cook Inlet where a lessee has drilled on private property without the consent of the owner. See response to Issue 2. State agencies do believe a clean environment is in the state's best interest. For this reason there are numerous laws and regulations that industry must adhere to. In addition, mitigation measures have been developed to address particular concerns. These measures become part of the lease contract. Chris Jacobson, 7/23/97 It is not in the state's best interest to offer Areawide leasing will still allow for public such large scale lease. Careful planning takes comment. Prior to each annual sale DNR will input from all sides on the issue. Areawide request new and significant information. See leasing will eliminate this. response to Issue 1. Mitchell and Hope Cline, Cooper Landing, AK, 7/23/97 Opposed to Sale 85. The sale area is too large See response to Issue 1, 4, 5, and 10. and the term of the best interest finding is too long. Oil and gas has a priority over all other uses. There is no justification for the sale. We could offer smaller areas which do not include Critical Habitat Areas or peoples homes or businesses. Diane Sallee, Palmer AK, 7/23/97 Opposed to Sale 85. The sale is in conflict See response to Issue 4. with many current uses of this vast area and gives oil a priority over all other uses. People throughout Southcentral Alaska depend on

this area to live, work, fish and recreate.

Jennifer Sutton, Anchorage AK, 7/23/97	7	
Opposed to Sale 85. It is unnecessary and I am uncomfortable giving oil and gas leasing such a high priority over an incredibly large parcel of land.	See response to Issues 4 and 5.	
T. J. Kovacevich, Anchorage, AK, 7/22/97		
Supports Sale 85. The oil and gas industry are able to coexist with private landowners and other commercial and industrial uses.	The history of the Kenai Peninsula over the last forty years has shown that fishing, timber, tourism and mining, including oil and gas, can coexist and support one another. The challenge is to balance these competing uses and to assure that development is done with minimum impact to the environment. See response to Issue 4.	
Thomas Meacham, Anchorage, AK, 7/22/97		
Opposed to leasing within state parks, wildlife refuges, critical habitat areas, or other legislatively designated areas. I do not believe that such state lands are available for oil and gas leasing under state law.	No legislatively-designated state parks will be leased in the proposed Cook Inlet Areawide sale.  It is incorrect to assume that just because an area is "legislatively designated" it is closed to oil and gas leasing. In fact several of the statutes establishing state game refuges and critical habitat areas recognize existing oil and gas leases and future exploration and development. For example, in the statutes establishing the	
	Trading Bay State Game Refuge, the legislature recognized that "all existing [oil and gas] leases shall be valid and continue in full force and effect according to their terms." AS 16.20.038(c). The statute also specifically allows further oil and gas exploration and development as long as it is compatible with the purposes of the statute. See response to Issue 10. See also above response to National Audubon Society.	

#### Linda Wright, Kasilof, AK, 7/22/97 Opposed to the size, scope and entire process DO&G is aware of opposition to the proposed of this sale. We are offering up our private sale from some people on the Lower Peninsula. and public lands for a few measly dollars to However, the sale also has a great deal of outside interests. support and DNR must consider the best interests of the entire state in making its decision. It is impossible to predict what the dollar return will be for this lease sale offering. See response to Issue 1. Michael Coumbe, 7/21/97 Opposed to sale 85 and the areawide concept See response to Issue 1 and 10. of offering the entire area every year for 10 years. Remove the Turnagain Arm, Knik Arm, any area within 25 miles of Anchorage, the area around the Kenai River, all areas south of Kasilof, both onshore and offshore and any other areas that have been removed from any other sales. A. S. Faithful. 7/21/97 It appears from the map that sale 85 is not in The local coastal management districts will accordance with the coastal management determine if this sale is consistent with their plans. It is also against the wishes of those local coastal management plans. DO&G is who live in Homer and Anchor Point. aware of opposition to the sale from some people on the Lower Peninsula. However, the sale also has a great deal of support and DNR must consider the best interests of the entire state in making its decision. Kathleen, Holt, Kasilof, AK, 7/21/97 Following the release of this Preliminary Best The deadline for public comment is nearly two years before the sale is to take place. Interest Finding there will be a 90-day comment After that I will not be able to voice an appeal period. Prior to each annual sale DNR will or lawsuit for 10 years. Why is the sale area request new and significant information. See so big and why is it binding for so long? response to Issue 1. Jim Lanier, Chugiak, AK 7/21/97 Opposed to Sale 85. Cook Inlet is my DNR believes that oil and gas development and playground. I use the Goose Bay and Susitna commercial and subsistence fishing can coexist

response to Issue 4.

in the proposed sale area and that any potential

negative environmental effects can be reduced through the application of mitigation measures along with existing federal, state, and local government agencies' permitting processes. See

Flats area for commercial fishing, duck

hunting, dog sledding.

#### Susan Olsen, Anchorage, AK, 7/21/97

Do not offer leases where one could see an oil well from the Coastal Trail, Potter Marsh, along Turnagain Arm, or other places of similar beauty.

Potential effects of oil and gas facilities on aesthetic resources and some proposed mitigation strategies are discussed in Chapter Five. See response to Issue 1.

## Cheryl Richardson, 7/21/97

Lease Sale 85 is too large to adequately protect areas of critical habitat for hunting, fishing and subsistence. How can wilderness be mitigated? It is unreasonable to expect informed comments from the public when the lease area is so vast and people cannot anticipate where actual drilling may take place. Delete river basins, Upper Cook Inlet, metropolitan areas, and critical habitats.

See response to Issues 1 and 4.

#### William Webb, Anchorage, AK, 7/21/97

Supports Sale 85. The concept of areawide leasing is long overdue and will benefit the peoples of Alaska.

Comment noted.

#### Ken Zafren, 7/19/97

The best interest finding should not be valid for 10 years. Each time leasing is proposed the BIF should be reviewed. The state should hold sales less often. If oil companies know they will have fewer chances, they are likely to bid higher.

Prior to each annual areawide sale the public will have an opportunity to review the finding and offer any new, substantial information that has become available since the finding was written. There is no correlation between the frequency of sales and the amount a company bids; the company's bid is based on its resource and economic analysis of the area. Annual areawide sales will allow companies to plan and develop their exploration strategies and budgets years in advance. This should result in more efficient exploration and earlier development of oil and gas resources.

### Scott Anya, Anchorage AK, 7/7/97

Delete any and all areas in view from Anchorage, MSB, KPB, and the Seward, Sterling and Parks highways. The proposed sale is incompatible with fish and wildlife, subsistence and tourism. DNR believes that over the past 40 years the oil industry has demonstrated that it can co-exist with other factions. A number of mitigation measures have been developed to address any incompatibilities that might exist between oil and gas exploration and development and subsistence, fish and wildlife, and tourism.

#### Carl Gonder, Wasilla, AK, 5/31/97

It is not possible for homeowners to know what recourse they have, what recovery for property damage by leaseholders. What will the impacts on schools, roads and traffic? When are public hearings going to be held?

ADNR has attempted to communicate the opportunities for public involvement in the sale process through a myriad of public notices and the stakeholders process. The stakeholders process included public meetings in the Matanuska-Susitna, Anchorage and Kenai Peninsula areas. The public comment process continues with the publication of the Preliminary Finding, which may be commented upon per the timeframe noted in Chapter Eleven. See response to Issue 8 for a discussion of the public notice and stakeholders process. The Finding includes information regarding the reasonably foreseeable effects on people, economy and government in Chapter Seven. See response to Issue 2 regarding property rights.

# Donna White, Anchorage, AK 5/15/97

Please exempt Potter Marsh, Kenai river, all state refuges and national wildlife refuges, Chugach State Park, and Nancy Lake State Recreation Area from Sale 85.

There can be no surface entry in Potters Marsh, or within ½-mile of the Kenai River. Each state refuge and national wildlife refuges was set up with specific provision either for or against oil and gas activity. The bulk of Chugach State Park is not within the sale area. The small portion that is has no-surface-entry provisions. Nancy Lake State Recreation Area is outside the proposed sale area, and has no-surface-entry provisions.

### Dennis Ramsy, Talkeetna, AK, 5/2/97

There have been many spills of various petroleum products in Cook Inlet that cause harm. Oil exploration must be done correctly or not at all. Areas of critical importance to fish and wildlife should be left alone. Drilling substances are dumped into the inlet everyday as normal operating procedure. Seismic operations will create permanent disruption to residential neighborhoods.

Oil spills can cause harm to the environment; however, the many regulations and laws that govern exploration and development activities endeavor to reduce the risk of having a spill and provide for a rapid, thorough response should one occur. See Chapter Five for a discussion of oil spill risk, prevention and response and Chapters Eight and Nine for regulations in place and measures proposed to provide protection for the environment. The EPA regulates the disposal of drilling wastes through the NPDES permit as discussed in Chapter Five and Eight. Drilling muds and cuttings are discussed in Chapters Five and Six. Proposed measure 18 regulates the disposal of drilling muds and cuttings. Chapter Six contains a discussion of seismic operations. Proposed Lessee Advisory 2 requires that lessees to include a plan to notify the public of their activities, in their seismic permit applications. Proposed Lessee Advisory 3 requires that forest clearing for seismic activity must be approved by the director of DO&G, after consultation with the Division of Forestry and ADF&G. It has not been shown that geophysical operations, as they must be conducted under today's regulatory environment, create permanent impacts.

#### Pricilla Russell, 7/16/97

Opposed to Sale 85 and every other lease sale from Ninilchik to Homer and beyond, now and forever.

Comment noted. DNR does not have the authority to permanently remove areas from its leasing program. That responsibility lies with the State Legislature.

#### Emilie Otis, Homer AK, 2/27/9

The entire Cook Inlet is not compatible with oil and gas development. Subsistence, recreation, tourism, fishing and hunting will be adversely affected by this sale.

The oil industry has been operating in Cook Inlet since the late 1950s, and has demonstrated that it can be compatible with other interests and industries. Neither tourism, fishing or hunting has been adversely affected by oil and gas activities in Cook Inlet. See Chapter Five and Six for a discussion of the cumulative effects of oil and gas activities.

Ed Ellis, Cooper Landing AK, 1/2/94		
Supports Sale 85, particularly those tracts north of T20N.	Comment noted. Tracts north of T17N will be available for exploration licensing .	
Mark Hodgins, Kenai AK, 12/16/93		
Supports Sale 85. Favors including as much acreage as practical in the sale.	Comment noted. See response to Issue 1.	
Tamara Smid, Beluga, AK 7/5/93		
Lease Sale 78 should be canceled. Salmon escapement goals for the Susitna drainage have not been met over the last several years. Some coho strains could be listed as endangered based on 1992 escapements.	According to ADF&G, the perception that escapement goals have not been met in the Susitna drainage is not correct. Fish populations naturally fluctuate from year-to-year. Short-term deviations generally have only a minor impact on any system's long-term productivity. Fish populations in Cook Inlet are much higher today than they were in the 1960s and 70s. A poor escapement in one year would not be cause to place a species on the endangered list. In addition, a number of Cook Inlet Northern District coho streams are being enhanced.	
Sport fishing is more important to local economy than oil development especially when the hydrocarbon potential is low to moderate.	A hydrocarbon potential of moderate to low is no reason to cancel a sale. Established oil basins thought to be low in hydrocarbon potential have had significant discoveries. The Division of Oil and Gas does not believe that oil and gas development and sport fishing are incompatible. Oil and gas exploration, development, and production have occurred safely in Cook Inlet for over thirty years. The Division believes that the proposed mitigation measures and existing state and federal environmental laws achieve a proper balance between oil and gas development and environmental protection.	